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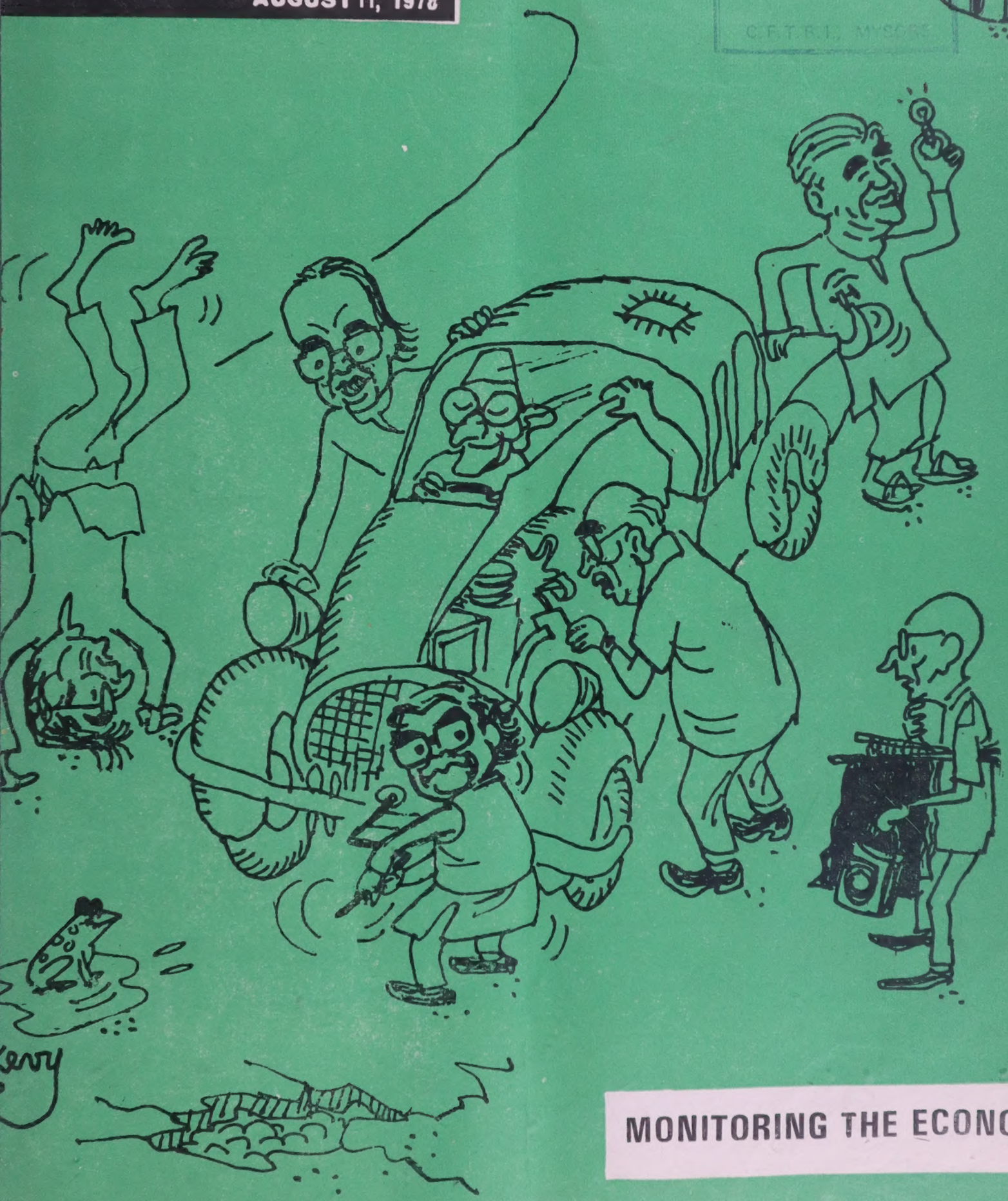

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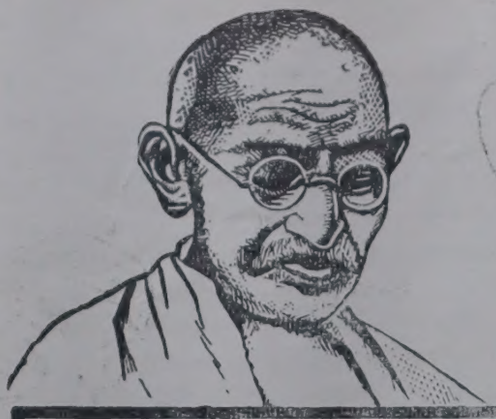
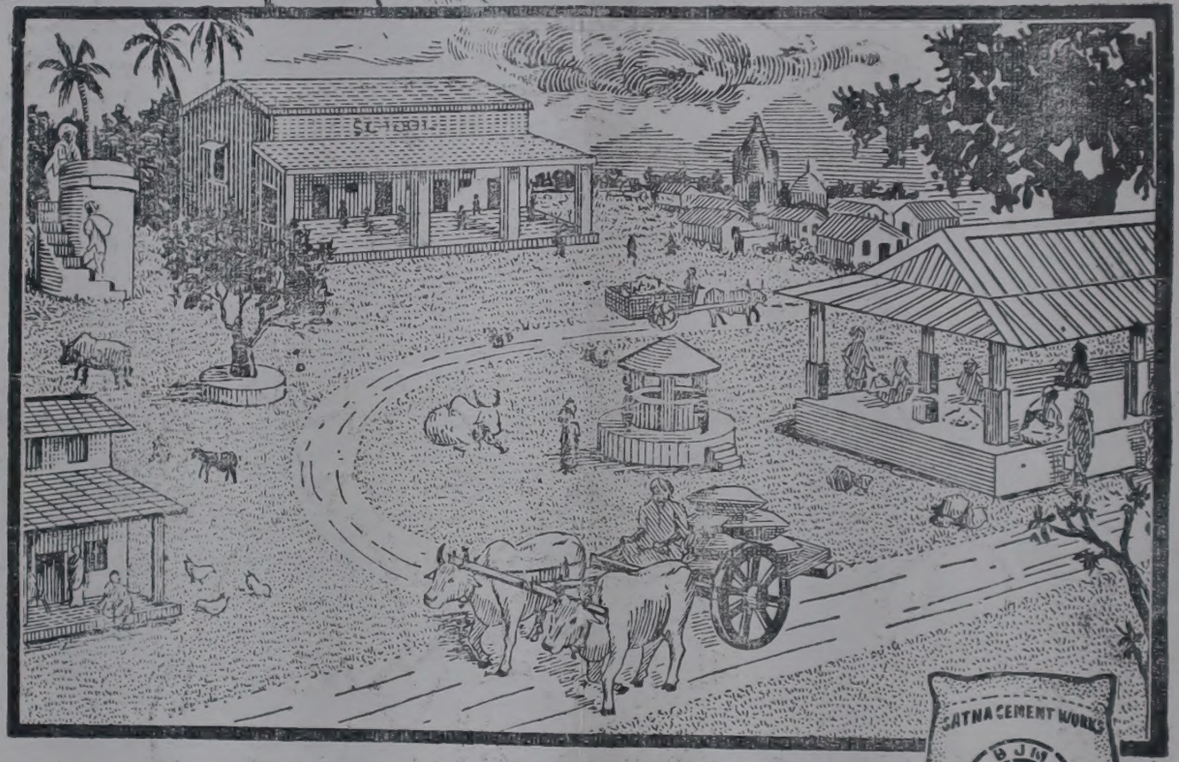


"आदर्श गाँव की मेरी यह कल्पना है कि उसके मकानों में काफी प्रकाश और वायु आ जा सके। गलियां, रास्ते, कुआं सब पक्के बने हों सबके लिये प्रार्थनाघर या मन्दिर हो, सार्वजनिक सभा के स्थान हों, गोशाला हो, प्राथमिक और माध्यमिक पाठशालायें हों जिनमें उद्योग की शिक्षा सर्वप्रधान वस्तु हो।" - महात्मा गांधी



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Hart has a heart

BRITAIN'S MINISTER for Overseas Development, Mrs Judith Hart's announcement of her government's decision to write off debts owed to it by 17 of the world's poorest countries, which have a per capita income of less than 280 US dollars, should pep up the North-South dialogue. Sweden, Canada and Switzerland had made similar policy announcements earlier, but to the government of the United Kingdom goes the credit for being the first in the big league of aid-giving countries to make this major move towards opening a new chapter in the transfer of development resources from the richer to the poorer nations. The moral pressure on Washington and Bonn to emulate the examples set by the countries which have taken the lead in evolving a new philosophy of development assistance must now be considerable; however, it is only fair to add that, in the case of the United States, PL 480 has been a historic landmark on the aid landscape.

Under the British scheme, arrangements will be made to remove the burden of past aid loans, known as retrospective terms adjustment (RTA), or to adopt equivalent measures in respect of the countries covered by this programme. This will cost the British treasury up to £60 million a year and it is estimated that the total amount of principal and interest to be written off over a period between now and the end of the century will be of the order of £900 million. India will be the principal beneficiary, to the extent of some £570 million. These costs are to be met entirely from within an increasing aid programme. While detailed arrangements are being discussed with each of the 17 beneficiary governments, in the case of India, it has already been decided that local cost aid will be offered instead of RTA. This evidently means that the relief in debt repayment liability accruing to this country, which may be of the order of £30 million or Rs 46 crores annually, will be translated into increases in Britain's aid relating to the local costs of assisted projects, particularly in the area of rural development.

The latest development in British aid policy is in line with previous liberalizations. The UK has been a member of the Aid India Consortium since its inception in 1958 and the quality as much as the quantity of its development assistance has been of considerable significance. Whereas the loans extended by it up to October 20, 1965 had carried interest payment obligations, which were equal to the UK treasury borrowing rate for a comparable period, the credits or loans became interest-free starting with the General Purposes Loan authorised on that date. Again, with effect from June 12, 1975, Britain's further aid to India is being given wholly in the form of grants. For the year 1977-78, the British government pledged an amount of £144 million entirely in the form of grants, representing an increase of nearly 30 per cent over the amount pledged for the previous year. The commitment for 1978-79 has been stepped up to some £150 million. To this will now be added another £30 million as a result of Britain's decision to cancel or refinance past loans. According to New Delhi's statistics, the debt due to be repaid to Britain as on March 31, 1978 amounted to Rs 820 crores, involving an estimated interest payment of Rs 9.70 crores during 1978-79. Incidentally, the UK is the largest bilateral aid donor to India.

The aid policies or practices of the assisting countries have been presenting a mixed pattern for some time now. One of the more encouraging trends, in addition to the decisions of a few donor countries to write off past debts, is the commitment made by a number of them to provide development assistance in the form of outright grants rather than in the form of credits or loans as in the past. For instance, all the official development assistance commitments made for 1977 by Australia, New Zealand and Norway were entirely in the form of grants while in the case of Sweden the proportion was as high as 98 per cent. The proportion of total grants to aid commitments was about 90 per cent or above in the case of Austria, Belgium, Finland, Italy, Switzerland and the United Kingdom. France, Canada and the Netherlands were other good performers in this respect, but in the case of the United States, grants were only 67 per cent of total commitments and in the case of the Federal Republic of Germany they were even less at 58.9 per cent.

Moreover, while 14 out of the 17 industrial members of the Development

Assistance Committee of the Organisation for Economic Cooperation and Development had improved their aid performance in 1977, with Sweden, the Netherlands, Norway and Denmark effecting particularly outstanding increases, there was a sharp decline in the ratio of aid to GNP in the case of the US and the Federal Republic of Germany and relative stagnation of Japan's ratio. As a result, although the total official development assistance provided by the members of the DAC was $ 14.8 billion in 1977, compared with $13.7 billion in 1976, this aid, as a percentage of the donor-countries' GNP, declined from 0.33 per cent in 1976 to 0.31 per cent—the second lowest ratio since statistics on aid flows were first gathered in the mid-1950s. It is clear that the next breakthrough in the transfer of development resources from the richer countries to the poorer must come through initiatives on the part of the US, the Federal Republic of Germany and Japan, but not necessarily in that order. The first two countries will have to think in terms of increasing the net flows of their assistance to the developing countries, both through debt cancellation programmes and the stepping up of the levels of their development assistance; in the case of Japan, the emphasis will have to be on immediate improvements both in the quantity and quality of its official development assistance. Incidentally, while the political climate in the US is not too favourable to liberal developments in aid policies, in Japan there is a growing recognition that, given its strong external resources position, it has so far been doing too little, too late in the aid field. That this trend of thought is influencing Tokyo's aid decisions is indicated by the softening of the terms on which Japan is now extending new loans and credits.

The rub in rubber

NATURAL RUBBER has been in the headlines for the past few weeks with recent developments proving to be an anti-climax at a time when the rubber growers and the Kerala government were representing to the centre for an upward revision in the minimum price for the natural product. This price was raised to Rs 655 per quintal from Rs 520 in August last year. With high level of internal production and an increase also in the output of synthetic rubber, it has been complained that there has been inadequate offtake by the manufacturers of automobile tyres and other rubber products. The open market prices were hovering around the minimum fixed by the government and it was bitterly felt that 'discounts had to be offered in the shape of higher grades of rubber at minimum prices fixed for inferior varities'. The Indian Rubber Board and the Kerala government had therefore been emphasising the need for relieving the glut of supplies by effecting export of 10,000 to 15,000 tonnes and also carrying out buffer stock operations. The State Trading Corporation was entrusted with the task of completing support purchases in the early stages and exporting also limited quantities subsequently. These exports had to be subsidised as prices in world markets were lower than those secured on internal sales even in depressed conditions.

This situation however has vastly changed in recent months and there has been an unprecedented boom in rubber prices. The quotation for superior grades has risen by more than 80 per cent in eight months, a rate of over Rs 1200 per quintal being touched early in July against Rs 700 a few months ago. This spurt in prices was welcomed by the Rubber Board and the state government while consumers of natural rubber were caught napping as there was also concurrent rise in the cost of synthetic rubber. What precisely were the factors responsible for the skyrocketing of prices has not been satisfactorily explained. World prices too have been rising but they are well below the parity of Indian prices. It was therefore demanded that there should be imports of at least 15,000 tonnes for preventing an artificial rise in internal prices and bringing them down also to reasonable levels. The centre's announcement of its decision to import 15,000 tonnes of rubber had a sobering effect on speculative activity and prices came down by Rs 100 per quintal from peak levels. The rubber growers and the state government got concerned over this decision as it was feared that even marginal imports would have a depressing effect on internal prices and bring about a reversion to the earlier depressed state of the rubber market. It was therefore represented to the Commerce ministry that the decision should not be implemented and that the state government would endeavour to reduce prices to around Rs 1000 per quintal in a short period. New Delhi has agreed to this suggestion on condition that the open market prices will not be unreasonable.

position reversed

The demand for an upward revision of minimum prices by Rs 150-200 per quintal has therefore receded to the background. On the contrary efforts are now being directed towards a regulation of prices and even fixation of an indirect ceiling. It is being examined what exactly is the import of the recent developments and what should be the policy in regard to the augmentation of production of natural and synthetic rubber and imports. In the past decade no difficulty was experienced in meeting the needs of consumers as the output of natural rubber was rising by an average of 10 per cent and the offtake by tyre companies and other users of industrial product was not increasing adequately. It has even been argued that the tyre producers should carry minimum stocks equivalent to their consumption of four month and facilitate the orderly marketing of an increasing volume of rubber production. In 1976 and 1977 the problem became acute and exports had to be effected of 11,178 tonnes in 1977-78 and 12,296 tonnes in 1976-77. These exports were intended to relieve the glut of stocks and it was not expected that there would be a shortage of supplies for internal consumption.

The actual developments, however, have come about in a different way in recent months. For the first time in the

past few years natural rubber output in 1977-78 was lower at 147,000 tonnes against 150,000 tonnes in 1976-77. Even though the drop was only marginal the net reversal was of the order of 13,000 tonnes, there being usually a rise of 10,000 tonnes annually. Simultaneously, the output of tyres has risen smartly with a sudden pick-up in the demand for tyres.

diverted traffic

The difficulties relating to availability of railway wagons and a decline in the tonnage handled by railways due to various factors resulted in an increase in the movement of goods by road. The output of tyres in the first four months of 1978 has improved by 10 per cent and if the higher rate is maintained, total production in 1978 may be easily 6.65 million sets of tyres and tubes against 6.17 million sets of tyres and tubes in 1977. If the existing capacity is fully utilised and there is no shortage of power and raw materials, production can rise to even 6.8 million sets. The consumption of rubber by tyre units even in 1977 increased by about 8,000 tonnes while total consumption of all manufacturers in 1977 was 145,000 tonnes against 138,000 tonnes indicating that the increase in aggregate consumption was mostly on account of tyre manufacturers. As there was a shortfall in rubber production by 2645 tonnes and exports were effected of 11,178 tonnes, stocks declined to 44,027 tonnes at the end of March 1978 from 53,085 tonnes in March 1977. This level of stocks was quite adequate for meeting the needs of all consumers during the lean period of tapping but it has been pointed out that superior grades of rubber had been exported and offgrades and unusable rubber formed a good portion of base stocks.

The anxiety of tyre producers to lay in adequate stocks and unexpected decline in production during the lean season due to the suspension of tapping operations in rubber states on account of heavy rainfall led to hectic speculative activity and scramble for buying. Apart from putting forward a demand for suspension of exports it is also urged that there should be imports as stated above. Over and above the inflation in costs on account of higher rubber prices it was also feared that there would be interruption to production of tyres due to shortage. The fears in this regard to some extent were exaggerated though the question has been asked whether the output of natural rubber in 1978-79 would register the usual earlier increase of 10,000 tonnes and aggregate output will rise to 157,000 tonnes.

In view of the setback in recent months it may be difficult to recover fully the lost ground. It is, however, stated that the higher prices would encourage intensive tapping and lead to higher output in the coming months. But the stock position is not satisfactory as only 30,000 tonnes were held by dealers and tyre companies at the end of July. If aggregate consumption rises to 156,000 tonnes in 1978-79 and there is no matching increase in output of natural rubber, increasing quantities of synthetic rubber may have to be used. The output of this latter product cannot however be raised beyond 30,000 tonnes annually even with the ample availability of alcohol. While the decline in prices from the peak levels by over Rs 100 per quintal had been welcomed on reports that regular tapping has commenced in the rubber growing areas, the situation has to be carefully watched if an undue rise in prices is to be avoided. The trye companies have already raised their prices for offsetting the higher costs though it is emphasised that the neutralisation has been done only on the basis of an average of Rs 950 per quintal of natural rubber. It may not be difficult to augment supplies by permitting imports though the duty will have to be removed for making available the imported product at internal parity. What is, however, more important is the re-emergence of the earlier upward trend in rubber production. If this trend was interrupted in 1977-78 due to labour trouble, depressed prices and other factors, there should not be any difficulty in raising output by 10,000 tonnes in 1978-79. The Indian Rubber Board and the Kerala government have a special responsibility in this regard.

Fertilizers : problem of plant costs

THE OBSERVATIONS of Mr S. Venkitaramanan, vice-chairman of Southern Petrochemical Industries Corporation (SPIC) at a press conference in Madras recently have brought out clearly the difficulties experienced by large-sized fertilizer plants involving heavy capital outlay. Not long ago, SPIC was considered a high cost unit as compared to the earlier entrants in the field as the capital outlay of Rs 110 crores was unduly heavy and without preferential treatment in regard to the fixation of retention prices for fertilizers, the investment would not be worthwhile. The central government, however, did not comprehend fully the problem that would arise as a result of commissioning of new capacity at rising capital cost and the technical difficulties experienced in operating sophisticated plants.

In view of the differing technologies adopted in several units and varying capacities, the operating ratio has not been satisfactory and the average for even earlier entrants was less than 60 per cent, the shortage of power and unexpected outages also having an inhibiting effect. It is only latterly that concerted efforts have been made to improve the efficiency of working of units in the public, private and joint sectors and the output of nutrients in terms of nitrogen is now running at an annual rate at well over two million tonnes. This level of production cannot, however, be considered flattering as installed capacity is in excess of 3.5 million tonnes of nitrogen.

Only the Gujarat State Fertilizer unit, the Trombay plant, the Kotah unit of Delhi Cloth and General Mills, Coromandel Fertilizers, the Kanpur unit of Indian Explosives and Madras Fertilizers can be said to be acquitting themselves

creditably. The Cochin, Alwaye, Barauni, Neyveli and Durgapur plants have not been functioning efficiently while the Sindri factory is suffering on account of obsolescence and ageing of equipment. The handicaps experienced by the units are being overcome though the improvement in production is slow and heavy losses are being suffered, impairing seriously the efficiency of the units concerned. It should certainly be possible to raise the operating ratio considerably and increase indigenous production of fertilizers by four to five lakh tonnes of nitrogen even with the existing capacity. The value of this additional output will be more than Rs 150 crores at the prevailing world prices.

improvement in productivity

Apart from ensuring larger quantities of nutrients from indigenous sources and saving sizable expenditure in foreign exchange through a displacement or avoidance of imports, the financial position of the affected fertilizer units also will improve considerably. The experience of SPIC in 1977-78 clearly shows what beneficial effects will flow out of an improvement in productivity, fixation of higher retention prices and better management of inventories. The term lending institutions also have recognised the need for lowering interest rates on medium term loans especially where there has been heavy gearing of the capital structure and the debt equity ratio is high. In the first two years, there was preoccupation with the commissioning of the different units and the achievement of a fairly high level of productivity.

It had also been represented to the government that a reasonable retention price should be fixed for urea and the distortions in the cost structure on account of sharp rises in prices for several inputs should be recognised with a view to providing required relief in the form of subsidies or other concessions. There was considerable delay in taking a decision in regard to the revision of retention prices for urea while a relatively low operating ratio and bottlenecks in the shape of defective heat exchangers affected profitability of working. The cost of replacement of the defective heat exchangers was only a little more than one crore rupees representing about one per cent of the total capital outlay. The British suppliers of this equipment no doubt agreed to the replacement at their cost and the exchangers imported from Japan and installed have been helpful in improving productivity considerably.

Even on the assumption that there was loss of output of 10 per cent of ammonia, over 75,000 tonnes of urea production could have been lost on this score, if not more. The value of this output was Rs 10 crores. If it is reckoned that the loss of output was over 10 per cent of the installed capacity the value involved would be easily Rs 15 crores. This method of computation of losses arising out of defects even in small sections of plants underscores the importance of giving attention to the quality of equipment and engineering services at the erection stage where heavy capital outlay has to be incurred on sophisticated plants.

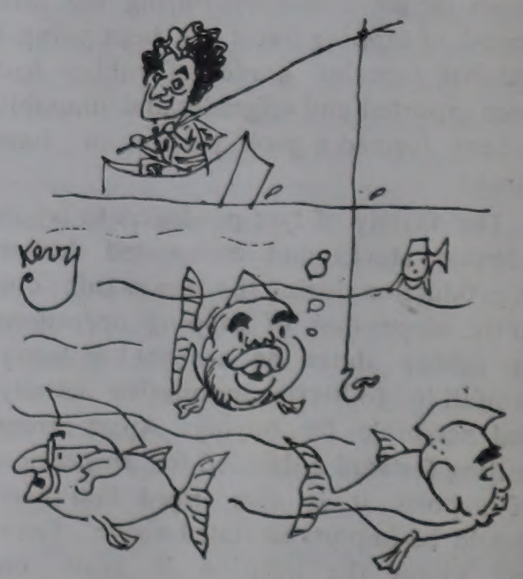
inevitable mistakes

However, it has to be remembered that mistakes are inevitable to a certain extent where changes in design and technologies and the operations of single stream plants are concerned. Technical difficulties were experienced at the Goa plant of Zuari Agro-Chem while some problems have been encountered also at the Mangalore plant of the joint sector venture. Even in the Kanpur unit which is a double-stream plant, technical snags have to be overcome though the Madras Fertilizer plant was extremely lucky and the teething troubles were not serious. On the other hand, the choice of technology for the plants at Cochin, Barauni and Durgapur has not been correct and the government is paying dearly for the mistake.

It has been legitimately claimed by Mr Venkitaramanan that the performance of SPIC for the first three years had been highly satisfactory and the achievement of an operating ratio of 66 per cent for the ammonia plant is creditable. This performance has not been excelled by any other unit at similar stages except perhaps the Coromandel Fertilizer unit and the Madras Fertilizer plant. This gives rise to the question whether even the new policy with regard to fixation of retention prices for urea is correct as it does not make any allowance for the difficulties experienced by new units in the earlier years or provide any adequate weightage in the price fixed for the products based on the new formula.

The new approach to the pricing policy and the efforts to reduce interest charges on term loans and working capital on a negotiated basis with the financial corporations and banks have however been highly fruitful and SPIC has been operating on a break-even basis for several months. It has been indicated that there would be no cash loss in 1977-78 and there will even be part earning of depreciation charges enabling fulfilment of obligations in respect of current interest payments. The generation of internal resources also has been helpful in clearing outstanding bills while brisker marketing of current production and better management of inventories have resulted in a net saving of Rs 10 crores in a year.

The working results would have made better showing but for higher transport charges on marketing fertilizers even in the economic zone due to shortage of railway wagons. The loss on this account is said to be 50 per cent over the assumed railway freight charges while the average freight charges for handling the whole output has been worked out to Rs 100 per tonne against the assumed freight charges of Rs 38.50 per tonne. It has been stated that representations have been made to



the government for adequate adjustments in prices or some other arrangements for freight pooling as in the case of cement which will take care of heavier expenditure on transport due to factors beyond the control of the managements. Even with the advantage arising out of higher retention prices, the lower interest charges and a brisk demand for fertilizers, the profitability of working of SPIC in 1978-79 is expected on a conservative basis to be such as to enable the management to earn fully interest and depreciation charges.

The favourable developments will not thus enable SPIC to tackle the problems relating to the repayment of overdue interest charges which have been computed at Rs 30 crores. Even allowing for a possible write down of this amount by nine crore rupees, with accordance of retrospective effect for revised interest rates on term loans and working capital, there will still be a balance of Rs 21 crores to be amortised over a period. The arrears of depreciation charges and the claim in respect of development rebate also have to be absorbed with a realisation of higher gross earning in the coming years. Strenuous efforts are therefore being made to increase the operating ratio with the adoption of de-bottlenecking measures and technical advice of British and Japanese experts.

rewarding exercise

This exercise could certainly be rewarding though it will be necessary to instal balancing equipment or use imported ammonia and phosphoric acid for making fuller exploitation of the capacity of the urea plant and diammonia phosphate plant. It is also being examined how new schemes can be implemented which will ensure a higher level of profitability.

These approaches clearly emphasise the difficulties involved in tackling problems pertaining to capital intensive units. There will have to be greater awareness on the part of the government when considering particularly the issues relating to return on investment in new plants. The ministry of Petroleum and Chemicals has a special responsibility in this regard as new capacity for manufacturing fertilizers using different types of feedstock will be created in a big way in the coming years and any inhibition about the adoption of a proper pricing policy will create serious difficulties for the government as well as the units concerned. Mr H.N. Bahuguna, the minister for Petroleum and Chemicals, is aware of the importance of a proper pricing policy as he observed recently that "fixation of prices without taking into account the cost of production had resulted in fertilizer industry going sick. While the prices of feedstock like naphtha and fuel were increased, the price of the end-product was pegged down. The industry was being resurrected from the neglect of the past....". It will however be no easy task for the government to evolve a price structure for fertilizer which will eschew the heavy subsidy element and also ensure reasonable profitability of working for all units but the challenge should be met as the demand for fertilizers is bound to increase spectacularly in the coming years with the larger use of inputs in new areas and an extension of irrigation facilities in an impressive manner during the current Plan period. Heavy subsidies can be avoided and the industry also enabled to function profitably only if the cost of new capacity can be suitably minimised by reducing the impact of duties and interest charges and instituting arrangements for achieving a higher operating ratio and production.

Power in eastern India

THE WORKSHOP on power planning in the eastern region, organised in Calcutta on July 25 by the Association of Indian Engineering Industry (Eastern Region), focussed attention on certain aspects of this major problem and suggested some short-term solutions. Although all industries have been affected by the power crisis, its impact on the engineering sector seems to be more severe. The industries in this category are yet to recover fully from the effects of the recession and their excellent growth prospects are being stifled by the inadequate and irregular supply of power and its uncertain prospects in the coming months. Mr R.C. Maheshwari, chairman of the Energy sub-committee of the association, said that the loss in national production owing to power shortage and erratic power cuts was of the order of Rs 500 crores a month. The association does not seem to have worked out the loss incurred by the engineering industry in the eastern region or in West Bengal but this loss must indeed be substantial. What is not adequately realised is that the government is also losing heavily in revenue on account of the disruption in production and the lack of new investment.

Mr Maheshwari highlighted the poor progress made in the eastern region in power development. He said that the total installed capacity in the eastern region was the lowest with 4393 MW compared with 5679 MW in the northern, 4725 MW in the southern and 5749 MW in the western regions. He revealed that even after the proposed additions in capacity during the sixth Plan, the eastern region would still be lagging behind. In West Bengal the per capita consumption in terms of kilowat hours is 116.7 against 144.3 in Tamil Nadu, 146.6 in Haryana, 180.0 in Gujarat and 231.3 in Punjab. The states in the eastern region have been lately giving greater attention to the problem of power development and New Delhi is also taking more interest in this matter. But both the state governments and the government of India can certainly do a great deal more to improve generation from the existing capacity and ensure its proper distribution. Mr Maheshwari disclosed that the transmission losses in India were almost 100 per cent higher than the international level. Is not this situation mostly due to indifference and inefficiency on the part of the authorities concerned?

Mr Jyoti Basu, the chief minister of West Bengal, who inaugurated the workshop, referred to the "bold steps" that the state government had taken to improve power supply but he warned that "the danger of load-shedding remains". He

should see to it that, so long as load-shedding has to be continued, it is resorted to in a planned manner so that industrial units will not have to put up with sudden interruption to productive activity, resulting in wastage of raw materials and damage to expensive machinery. Is it really beyond the capacity of the authorities to stop the practice of unscheduled load-shedding especially at present when West Bengal has been assured of some supply of power from Orissa? Mr Basu said that New Delhi's attitude had also been helpful except in regard to the levy of tax on coal and electricity. The West Bengal government therefore should concentrate on measures which will provide some immediate relief to industries from the agony of erratic load-shedding. The government of India recently announced a programme to double the rate of growth in industrial production in the current year. But how does New Delhi expect to achieve this target without effectively tackling the power problem in the eastern region which contributes substantially to the country's industrial production?

constant dialogue

Mr Basu told the workshop that his government would welcome constant dialogues with the private sector in dealing with the power shortage. Such dialogues will help only if the government is prompt in implementing the suggestions made by the private sector. It is, of course, not suggested that all such proposals should be carried out but, surely, it should be possible to take quick action at least on those where there is agreement between the government and industry. For example, Mr Basu said at the workshop that he would discuss with New Delhi industry's demand for subsidy for installing captive power plants. This plea was made by industry even when Mr Siddhartha Shankar Ray was the chief minister and it has been reiterated on several occasions after Mr Jyoti Basu formed his ministry. Why then is the matter being delayed? If the state government feels that captive power plants may not be necessary because of the proposal to instal gas turbines, it should frankly say so. A large number of industrial units submitted their applications to the state government many months ago for subsidy and soft loans for setting up captive plants. The government should either take quick action on these applications or tell the units that such facilities will not be available.

Apart from captive plants, the West Bengal government has been giving a subsidy on the power consumed by new industrial units and by the existing ones which undertake substantial expansion. This concession has been given as a part of the package of incentives offered by the state government for promoting the development of industries. But the West Bengal government has not been operating it in a manner which will help industries to plan their projects with confidence. Industry had expected that this scheme would be automatically extended after it expired on March 31, 1978. But for several weeks, the government did not spell out its policy in this regard and ultimately it announced recently that the scheme would be continued till the end of September this year. This is a matter which comes almost entirely within the purview of the state government and one wonders why the latter is adopting a half-hearted approach to it.

A major problem faced by the generating agencies in West Bengal relates to the shortage of power during the peak hours in the day and excess capacity during night. The department of Power has been trying to tackle it by persuading some industries to transfer more load to the night shift. This proposal has also been under consideration for the past two years or even more and there have been several dialogues between industry and the Power department. But it has not been possible to evolve a scheme for this purpose because of the inadequate incentives offered by the generating agencies. The tariff rebates proposed by the Calcutta Electric Supply Corporation and the West Bengal State Electricity Board have been considered to be too meagre to enable industries to switch over to the night shift. There are also problems relating to the willingness of workers to agree to such a scheme. The government, industry, and the trade unions should pursue this matter and come to an agreement since it will provide some immediate relief from power shortage.

It is indeed unfortunate that when West Bengal's economy is poised for rapid growth, power supply is being deliberately disrupted by the agitation on the part of some workers. Mr Jyoti Basu told the workshop: "Some irresponsible workers are trying to hold the state to ransom. They have no legitimate economic demands. What they are doing is inimical to the working class". The state government should tackle this situation with tact and firmness so that its efforts to improve the supply of power will have the desired effect.

Eastern Economist 30 Years Ago

AUGUST 13, 1948

It is profoundly true of nations, as it is of individuals that they do not live by bread alone. But where primary poverty exists it is equally true that nothing is possible without bread in its widest sense, the symbol of all material needs. In this sense to the very great majority of our people until bread is found, there will be no vital political progress and no educational and indeed, however, many temples may adorn the land, no spiritual or religious progress. It is right and proper, therefore, that we should give our largest attention in this review of progress in a year of freedom to the economic front, giving it precedence even over the gifts of the human spirit which alone divide our lives from those of other living things. Unfortunately, it is in this sphere—by far the most important of all—that our failure has been great. We may take pride that India is today more united than ever before; we can take no pride that in this momentous year India is, in any economic sense, in better heart.

There are many close students of economics who, viewing the tremendous events of this year, wonder that economic disorganization has not been far greater and economic distress even larger than it is. There is some consolation—if we seek consolation—in this view; if it shows nothing else it shows a capacity for adjustment—often for quiet uncomplaining resignation to rude events.

CAPITAL'S CORRIDORS

R. C. Ummat

Fertiliser production • Exporting to Japan • Mineral policy • Monitoring production trends • Cryo-containers for Operation Flood

THE ORIGINAL target of producing this year 500,000 tonnes of nitrogen more than the two million tonnes output last year is understood to have been halved. The revised target envisages the raising of production this year to only 2.25 million tonnes.

The scaling of the target has been necessitated by setback to production during April and May on account of the extension of the annual shutdowns at the Durgapur, Barauni and Cochin plants owing to mechanical breakdowns, some slippages in the commissioning of the new plants and constraints of raw materials, etc.

inadequate power

The availability of power has also not been adequate and as a result the public sector projects alone had to suffer a production loss of about 10,000 tonnes N during the three months to June. The situation in this regard, of course, appears to have been somewhat better than last year. During 1977-78, the total production loss due to shortage of power at the public sector plants had amounted to as much as 75,870 tonnes N. The only project where production has been seriously affected this year so far has been the Durgapur plant: the production loss during the April-June period this year at this project exceeded the total loss during last year by as much as 84 per cent. The Nangal project, which has been suffering from acute power shortages for several months during the recent years, incidentally, did not report any production loss during the first quarter of the current financial year.

Of the new projects expected to be completed this year, Nangal expansion and Trombay-IV have already been commissioned. The Sindri Rationalisation Scheme was expected to commence commercial production in October this year and the Sindri Modernisation Scheme in January next. Commercial production at these two plants may take slightly more time.

beneficial rains

Several private sector projects are said to be experiencing shortages of power. But the situation at most of these projects is expected to improve as a sequel to the recent beneficial rains and the steps being taken to augment coal supplies to the thermal power stations. From the long-run point of view, the government has already approved in so far as the public sector fertiliser manufacturing units are concerned, the setting up of captive power generation facilities at the Gorakhpur, Trombay and Durgapur projects so as to enable them to meet at least their critical power requirements. A similar project has been proposed for Barauni. The critical power requirements of the entire Namrup complex are expected to be taken care of by the facilities proposed to be created as part of the Namrup-III project envisaged to be set up during the current Plan period. The power requirements of the Nangal unit would be reduced substantially with the stabilisation of production at the recently-commissioned expansion project which is based on fuel oil as feedstock. This plant will make available adequate quantities of ammonia to the existing Nangal unit. The Cochin unit of FACT has already a captive power generation system to meet the requirements of its critical sections. Power constraint is not said to be a major impediment to production at Rourkela.

The production of phosphatic fertilisers this year is expected to be raised to 0.75 million tonnes from 0.67 million tonnes last year. The shortfalls in the production of nitrogen and P_2O_5 vis-a-vis the requirements during the current year (estimated around 2.888 million tonnes and 0.827 million tonnes, respectively) are proposed to be met by imports. The estimate of consumption of potassic fertilisers this year is around 0.47 million tonnes. As there are no manufacturing facilities for these fertilisers, the entire requirements have to be met by imports.

* *

Under the global pressure for stepping up its imports, Japan has recently identified a large number of items which it would like to import in increasing quantities. Though a perusal of this list reveals that so far as manufactured items are concerned, the major beneficiaries of the liberalisation programme would be the developed countries, the developing countries such as ours can also benefit to some extent.

The list includes several items which Japanese importers are interested in buying from this country. They are as follows:

(i) **Minerals**: Kyanite, sillimanite, kaolin, marble, emery.

(ii) **Leather and Leather Products**: Finished, sem-finished and wet blue sheep and goat skins, various kinds of finished leather products.

(iii) **Wood and Wood Products**: Ebony wood, rose wood, veneers, plywood, wood carvings, sandalwood articles.

(iv) **Foodstuffs**: Dried heads and peels of lobster, prawns, shrimps, cashew nuts, almonds, pistachio, fresh or dry banana, mangoes, dry or processed ginger, stinkweed seed.

(v) **Textiles and Yarns**: Raw silk, Shantung strips design, silk waste, spun

silk, yarn, woven fabrics of cotton, T-shirts (under-wear), men's and ladies' shirts made of handloom cloth, readymade garments of new fashion.

(vi) **Other Items**: Hand-made carpets, rugs and mats, interior decorative goods, folk craft, precious stones and ornaments, polished diamonds, bench-vice tools, coloured pigments, incenses, toys, fireworks.

The Indian exporters can also have some share in Japanese imports of the following items for they are to be procured by Japan from any country in the world:

(i) **Foodstuffs and Animal Products**: Frozen or chilled/dried/salted/smoked meat of animals, poultry items, marine products, natural cheese, vegetables (particularly peas and beans), citrus fruit, tea, coffee, spices, natural honey, fruit jams, sauces, feed supplements for race horses.

(ii) **Other Animal Products**: Animal hair (dressed in bundles), feather (dressed), duck down and feather, goose down, raw ivory tusks, furs.

(iii) **Mineral Ores:** Tungsten ore, manganese dioxide, alumina, high purity silicon, zinc oxide.

(iv) **Oils and Oilcakes**: Mixed vegetable oils, animal oils, coconut oil, palm oil, etc.

(v) **Confectionery**: Biscuits, cookies, crackers, milk sugar.

(vi) **Leather and Leather Products**: Cat and dog leather (parchment, dressed), travel goods, bags, wallets.

(vii) **Paper Products**: Unbleached craft paper, white printing paper, special papers, cigarette paper, wall paper, wall coverings.

(viii) Chemicals and tanning agents.

(ix) **Manufactured Products**: Industrial sewing thread, 100 per cent wool fabrics, woven fabrics of flax and flax waste, gloves of all kinds, shawls, scarfs, umbrellas, glazed and unglazed mosaic tiles, ceramic tools, silver products, alloy steel products, high speed steel bars, alloy tool steel, steel tubes and pipes, aluminium ingots and scrap, steel strips, household wares, utensils, tableware, coolers for heavy duty trucks, car accessories, auto parts, spectacle frames, optical appliances and instruments, electric steam iron, sports goods, tooth brushes, hair brushes, electrical appliances, rubber products, perfumed soaps, X-ray accessories (including used X-ray films), various handicrafts.

(x) **Machinery and Equipment**: Construction machinery, packaging and wrapping machinery, ball bearings, dryers, engine-driven equipment, engines and motors, pumps.

(xi) **Electronic Items**: Fixed and variable resistors, diodes, transistors, semiconductor devices.

The Japan External Trade Organisation (JETRO) is also establishing currently display facilities in the world mart building in Ikebukuro, Tokyo. An area of 2,500 sq metres is proposed to be reserved in this building for the developed countries and 300 sq metres for the developing nations for display goods available for import to Japan. These display facilities will be in addition to the provision for permanent display of developing nations' manufactured goods at JETRO's head office in Tokyo. The terms and conditions in respect of the new facilities are not yet available.

A new department will also be established by JETRO this year for the effective implementation of the expanding import promotion projects, as a significant portion of JETRO's work now concerns import promotion. India, it may be recalled, participated early during the current decade in the exhibitions arranged by JETRO at its head office in Tokyo. They are aimed at introducing the products of the developing nations to the Japanese market. Since the inception of these exhibitions in 1966, 38 different countries are stated to have participated in them by turn.

* *

Addressing the 12th annual general meeting of the Federation of Indian Mineral Industries (FIMI), the minister for Steel and Mines, Mr Biju Patnaik, conceded that the growth of mineral industry in the recent past had left much to be desired. He, however, hoped that as a result of the steps taken by his ministry to remove the procedural hurdles which had been inhibiting growth, the production of minerals, both for catering for the requirements of the domestic market and exports, would receive impetus. He revealed that the entire backlog of cases relating to the grant and renewal of small mining concessions had been cleared by his ministry and the legal powers vested in the government under the Mines and Minerals (Regulation and Development) Act had been exercised with restraint. Any suggestions for further rationalisation of the act to cut down delays, he said, would be welcomed.

need for identification

Referring to the role of the private and the public sectors in the minerals industry, Mr Patnaik agreed that there was need for more precise identification and delimitation of the individual mineral-bearing areas. An important announcement he made in this connection was that the thrust of the policy would be towards the public sector taking up mining mainly in the new areas with major potential. He, of course, did not rule out the possibility of public sector taking control of such large mines which were not being worked to their optimum capacity in a scientific manner. The public sector industrial units such as steel plants, he added, would also have to be given a pre-eminent position. Wherein they needed to secure stability in the quantity of supplies, they would be allowed to go in for captive mining.

As regards the role of private mineral-owners and exporters in the export field, Mr Patnaik's view was that the FIMI could supplement the effort of the official agencies like the Minerals and Metals Trading Corporation (MMTC) within the framework of the established policy. This implies that the plea of the FIMI in respect of imparting flexibility of this policy with a view to allowing private exporters of manganese ore to negotiate exports of small lots of selected grades of manganese ore to suit the particular requirements of foreign importers, which could not be fully catered for by the MMTC, might not be conceded by the government, even though the plea of the FIMI made good sense and could help in stepping up manganese exports to some extent. Mr Patnaik disclosed that the MMTC had recently

tied up contracts for the export of the entire quantity of manganese ore programmed for shipment during the current year. Export contracts for nearly 300,000 tonnes of barytes were also likely to be secured shortly, as against these exports aggregating to 225,000 tonnes last year. This would include a five-year contract for exporting about 100,000 tonnes of barytes per annum to one party.

* *

Last week it was indicated in this column that the Economic Affairs Committee of the central cabinet, consisting of the prime minister and the ministers for Finance, Industry, Commerce and Agriculture, would be meeting soon to consider the price situation, the recent setback to exports and the deceleration in the rate of industrial growth. This committee has since met. It has decided to set up a five-member ministerial group to monitor performance in such vital areas of industrial activity as steel, cement, coal and energy. The group consists of the ministers for Finance, Industry, Steel and Mines, Railways and Energy.

The group will also keep a watch on transport bottlenecks which hinder the flow of raw materials and finished goods. Expected to meet twice a week, it will suggest measures to remove any hurdles that might be noticed in the smooth functioning of the economy. The situation on the prices front is being closely watched. It is hoped that no undue pressures will be allowed to develop on this front during the current lean season when the prices usually tend to go up.

* *

How unjustified is the criticism of the Janata government that it is not interested in the growth of the public sector and is trying to appease multi-nationals and large business houses is borne out by the treatment being meted out to the proposal of Union Carbide for setting up facilities for the manufacture of liquid nitrogen containers. These containers have a crucial role to play not only in the phase-II of "Operation Flood" but also in various other fields of economic activity.

Union Carbide, it is learnt, had put forth its proposal to produce the above containers here in pursuance of a Rs 15 crores tender for supply floated by the National Dairy Development Board (NDDB). Notwithstanding the fact that the manufacture of these containers was envisaged to be undertaken by Union Carbide as a measure of its diversification programme and under the stipulation in regard to multi-nationals that they should introduce to the country the latest sophisticated technology, the minister for Industry, in consultation with the minister for Petroleum and Chemicals, is understood to have preferred their manufacture by either Indo-Burma Petroleum or Bharat Heavy Plates and Vessels, both public sector undertakings, which are said to possess indigenous technology for producing them.

The Union Carbide proposal had one great advantage in so far as it envisaged to produce the above containers from aluminium. The IBP and Bharat Heavy Plates and Vessels instead propose to use stainless steel. The indigenous production of both these metals at present, of course, is inadequate to meet the country's requirements, with the result that sizeable imports are being effected. But the shortage of aluminium obviously is temporary, resulting from gross under-utilisation of the installed capacity, which, if worked fully, cannot only meet the full requirements of the country but also leave some surpluses for exports. There are as well plans to expand aluminium manufacture at a fast rate during the next five years. The situation in regard to stainless steel supplies, on the other hand, cannot be expected to ease for several years despite the setting up of the Salem steel plant. The aluminium containers being much lighter than those made out of the stainless steel also yield other advantages, particularly in transportation.

It is not known whether the evaporation rate of the containers proposed to be manufactured with the technology available with IBP or Bharat Heavy Plates and Vessels will match that of the Union Carbide containers, which is claimed to be the lowest in the world. The whole project of Union Carbide would have involved only an investment of a crore of rupees. This would have been found from its own internal resources. The price of these containers, it is further learnt, would also have not exceeded the landed price of the imported ones.

Doubts are as well being expressed whether the two public sector concerns will be able to manufacture the above containers to the requisite size required by the NDDB. The indigenous technology is understood to be capable of producing containers of half the size proposed to be supplied by Union Carbide in terms of the requirements of the NDDB.

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Manager

Impact of corporate income tax on capital structure

G. D. Misra

The author, who is associated with the department of Economics, Banaras Hindu University, has made an empirical evaluation and come to the conclusion that the high rate of corporate income-tax discriminates in favour of debt capital in non-priority industries. For industries in the priority sector, there is change in the capital structure but not in favour of debt. The observed shifts in capital mix appear to be tax induced. For the solution of the problem of credit squeeze, he advocates the need for appropriate changes in the fiscal policy.

CORPORATION INCOME tax has been considered a major tool of providing incentives to various industries. This is commensurate with the objective of the development of industrial sector. In India during the planning period this tax has remained very much progressive (6, Gandhi, p. 97) throwing doubts about the intention of providing facilities to the industries in the priority sector. The introduction of sur-tax on excessive profits of the companies has made it a revenue yielding source.

Whether a tax has revenue raising objective or not, it creates differential effects (9, Levin, p 581) on economic activity. To make the tax policy successful efforts are made by public authorities to minimise the disincentive implications and to have desirable favourable effects. The tax on business profits affects economic activity in three main respects (3, Davis, p. 260). Investment plans of the company may change due to tax imposition so long as investment depends upon profits and rate of return. Stabilisation objective becomes doubtful if tax effect is in terms of rising prices. The improvement in the profitability position of the firm may have favourable implications towards its policy of profit maximisation.

Whenever taxation has its bearing on investment, stabilisation, and profit maximisation policies, this activity is the result of the process of shifting of the tax burden imposed on the taxpayer. This process of isolating the final place of incidence implies three possibilities (3, Davis, p 259): the possibility of shifting the tax burden either forward or backward, the movement towards optimum position, and tax avoidance. The effort of tax avoidance by the firm, if tax burden ultimately falls on the profits either partially or totally, influences its capital structure and thus paves the way for modification of the financial decisions. The object of this article is to find the nature of the effect of corporation income tax on capital structure and thus to test the tax avoidance hypothesis.

Capital structure refers to the relative proportions of the funds obtained from various sources. These sources are internal

POINT OF VIEW

and external. Externals are composed of debt and equity. In the existing literature the common practice has been to consider debt and equity—the two long term sources—and thereby their ratio to represent the capital structure. This is because in the developed capital market no hardship is faced by business concerns while raising funds. The internal funds occupy negligible proportion whose significant part is capitalised in the long run, if they are accumulated to maintain the reserve position. The dividend decisions are regarded primary. The short-term debt capital is excluded because over a long period it is either repaid or converted into long term capital. Thus debt and equity constitute almost the total capital and their ratio represents the capital structure. The debt-equity ratio often termed as 'leverage', is not much useful where capital markets are perfect. In underdeveloped countries such as ours where financial markets are not well developed and official controls[1] govern financial plans, the leverage is the main policy variable in the financial plans of most of the firms.

investment plans

The modifications in the financial policy are accomplished by changes in the 'capital structure'. Implied revisions in the 'finance mix' are desirable to realise the proposed investment plans. For instance, if the expected rate of return is higher, a more costly source of funds may be adopted. In underdeveloped countries, where there is acute scarcity of funds, investment plans are even revised. Thus so long as financial decisions influence investment plans, the determination of optimum capital structure remains an important problem.

Companies, whenever possible, prefer to raise funds through the cheapest source in order to minimise their cost because the value of the business varies inversely with the cost of capital. Theoretically that 'finance mix' is regarded optimal which maximises the value of the firm (minimises the overall cost of capital).

In the theory of financial management we have two types of financial decisions. The first decisions maximise the value of the firm and others remain quite independent of the value. The independent financial decisions are often referred as neutral with respect to investment plans. Market situations can be found, at least theoretically, where these decisions become incompetent in devising investment policy. These are in context with famous Modigliani-Miller hypothesis[2] (third proposition). The 'finance mix', which is chosen by maximising the value of the firm, stresses the significance of capital structure on the lines of classical proposition.[3] The

general belief is that the increase in the proportion of debt increases the value of the stock. Therefore, it is better to have as much debt as manageable keeping in mind the risk of insolvency.

The available literature on the subject suggests that the changes in the capital structure are inevitable. But they become quite frequent at least in the short-run, when tax is imposed on corporate profits.

adjustment of proportions

As a result of imposition of tax, companies try to pass their burden either forward to the consumers or backward to the workers. Whenever they find themselves unable to shift the whole of the tax burden, the capital is bound to bear whatever remains. Thus the burden on capital induces adjustment in the proportions of the constituents of the capital structure. The tax induced changes in the relative costs of the funds make the alteration in the proportions inevitable. In other words, on the one hand more accumulation of debt takes place due to interest deductibility from corporate earnings for tax purposes. This lowers the cost of debt in relation to equity and gives rise to trading on equity. The downward change in the relative cost is not due to the tax induced reduction in the cost of debt but due to increase in the cost of equity in the absence of such tax concessions. On the other hand tax laws permit a variety of allowances for specific purposes which make possible to develop the internal funds position, although cost of these funds is the lowest.

Thus the following points are pertinent:

(i) Financial decisions are important whenever they affect investment and thereby production behaviour of the firms.

(ii) The effect[4] of tax policy on investment plans is realised through its effect on capital structure. Thus in an economy with underdeveloped capital market tax policy ma8es the two decisions—financial and investment—interdependent.

(iii) Under the existing structure of taxes in the corporate sector, most of the companies have been unable to shift the burden of the tax[5] on their earnings making changes in the capital structure inevitable.

(iv) The remaining tax burden on earnings is more likely not to result in the proportionate change in three types of funds—internal, debt and equity—because of the existing discriminatory nature of tax incentives.

The studies dealing with the determination of appropriate capital structure are few and those which consider the tax variable as a determinant are almost non-existent. The reason is that in the developed countries, about which most of the studies are made, capital structure decisions are regarded unimportant. For instance, the study by Hall and Jorgenson (7), which is considered as a major study on the subject, is on the US economy. 'Introduction of tax on corporate profits reduces the cost of capital' is the crucial argument. The cost of capital is the major factor used as a deflator of accelerator variables in the investment equation.

Indian data

There is one study (16, Rao & Rao) in which Indian data has been used to find out the effect of corporate income tax on corporate debt policy. Time series data of aggregate manufacturing sector for 16 years (1950-65) has been used from the RBI bulletin. Debt-equity ratio is the dependent variable, where debt includes short-term as well as long-term funds. Independent variables in the equation are tax-rate, internal funds, rate of interest and lagged leverage. Dependent variable is defined in several ways and each definition is tried with rate of interest and lagged leverage separately. In all equations tax variable is found insignificant but positive. Therefore it is concluded that 'the effect of tax policy on debt financing decisions is negligible'.

The study by V.G. Rao and K.S.H. Rao (16) is a new attempt with Indian data to test the hypothesis that 'corporate income tax induces debt financing'. But the result of the study has been that debt financing is induced by non-tax factors,[6] without isolating them. The possible reason for rejection of the well-maintained hypothesis seems to be the coverage of the time period and the model specification. Therefore, in order to make any comment on the problem, it is desirable to include data after 1965 and make specification as much correct as possible on the basis of the empirical facts. The present article is an attempt on these lines.

Since our object is to find out the reasons for observed shifts in the capital structure, therefore the nature of the elements of the 'finance mix' should be studied separately in order to single out the factors responsible for change. These are two important elements of 'financial structure' namely, internal funds and debt. The internal funds are favourably affected when effective tax rate is very low and debt capital gets preference when effective tax rate is sufficiently high. The equity market in India has not contributed much to the accumulation of capital. Therefore equity funds are not worth analysing separately, although their influence on other types of funds cannot be kept aside.

Thus two equations are required to describe the behaviour of gross internal funds and external funds. Since equity funds are not treated endogenous to be determined explicitly, therefore the equation describing the behaviour of debt-equity ratio may be employed together with debt equation to say something about equity funds.

a 'must'

As regards the specification of the equations, the inclusion of tax variable is a 'must' because the magnitude and direction of the tax coefficient is to help the isolation of the tax induced effect on capital structure. The three equations of the model may be specified as:

$$(DBTOUT/NW)_t = a_0 + a_1 (S/K)_t + a_2 (I/K)_t + a_3 (INV/K)_t + a_4 (CA/TNA)_t + a_5 R_t + a_6 (TAX/PBT,_t. \quad (1)$$

$$(DBTFLW/NW)_t = b_0 + b_1 (I/K)_t + b_2 (INV/K)_t + b_3 (RED/NW)_t + b_4 (NI/NW)_t + b_5 \left(\frac{DBTOUT}{NW}\right)_{t-1} + b_6 (CA/TNA)_t + b_7 (TAX/PBT)_t \quad (2)$$

$$(RED/NW)_t = c_0 + c_1 (PAT/K)_t + c_2 (RED/NW)_{t-1} + c_3 (I/K)_t + c_4 (INV/K)_t + c_5 (DBTFLW/NW)_t + c_6 (NI/NW)_t + c_7 (DBTOUT/NW)_{t-1} + c_8 (CA/TNA)_t + c_9 (DPRCN/GFA)_{t-1} + c_{10} (TAX/PBT)_t \quad (3)$$

where RED : Retained earnings plus depreciation provision
PAT : Profits after taxes
I : Investment in gross fixed assets
INV : Investment in inventories
S : Sales position
DBTFLW : Debtflow (long term and short term)
NI : New issues
NW : Net worth
K : Paid up capital
t : Current period.

(DBTOUT/NW) : Debt outstanding to net worth ratio indicating financial risk.

(CA/TNA) : Ratio of current assets to total net assets indicating liquidity position.

(DPRCN/GFA) : Depreciation stock as a ratio of gross fixed assets implying age distribution.

R : Real risk defined as earnings variation i.e.

$$\left| \frac{(PAT) - \widehat{(PAT)}}{\widehat{(PAT)}} \right|$$

, $\widehat{(PAT)}$ stands for estimated profits and || for modulus.

(TAX/PBT) : Tax provision as a ratio of profits before tax which is effective tax rate.

Equations (1) and (2) are not independent. The behaviour of one may be explained by the other to great extent. But both have their different purposes. For instance, equation (2) explains the nature of debt capital with respect to short run adjustments in 'finance mix' and therefore it includes gross internal funds in the set of independent variables. The net worth variable is used as deflator in equation (2), whereas ratio of debt outstanding to net worth indicates the capital structure[7] in (1). Net worth which is defined as paid up capital plus reserves and surpluses, includes capitalised and non-capitalised retained funds. Debt outstanding to net worth ratio represents the liability structure and therefore explains the structure of capital cumulated (in stock terms). Since the dependent variable in equation (1) is in stock terms, no financial variable has been included in flow terms to describe the accumulation of capital.

The capital structure—the proportion in which funds are divided on liability side of balance sheet account—depends upon investment in fixed assets and inventories, turnover ratio, liquidity position and trading on risk in addition to the tax variable.[8] In equations (2) and (3) the variables which determine the requirement of funds are investment in fixed assets, inventory investment, the funds availability variables, liquidity position and financial risk. Apart from the tax variable in both equations, age distribution of fixed assets, after tax profit position and lagged internal funds appear to be additional variables in equation (3).

sources of data

The sources of data are the financial statements of medium and large scale public limited companies published in the Reserve Bank of India Bulletin (17). Eleven industries are chosen together with aggregate corporate sector for the analysis. The choice depends upon the availability of data for relevant characters. The industries are sugar, tobacco, cotton textiles. jute, engineering, chemicals, cement, paper and paper products (PPP), electricity generation and supply (EGS), trading and shipping. The observations belong to 24 years period (1950-51 to 1973-74).

The variables have been deflated[9] by paid up capital (K) and net worth (NW) in order to correct for changes in sample size over every five-year period. The profits, sales and investment variables are deflated by paid up capital whereas financial variables—internal and external funds—are deflated by net worth.

For the analysis of time series data, the method of estimation used is the Ordinary Least Squares (OLS) procedure. Finally those variables appear in the equation whose t-value exceeds unity because of stepwise regression option (14, Rao and Miller, p. 66) to choose for the correct specification. Summary statistics R^2, $\bar{R}^2$ and Durbin Watson (DW) have been used to decide about the appropriate form of the relation.

Empirical findings can be had from Tables I, II and III. For detailed interpretation of equation (2) and (3), see G.D. Misra (11, 1976). Equation (1), which explains capital structure defined as the proportion of debt capital to non-debt capital is of prime concern. The other two equations are used to support the findings of equation (1).

Looking at the first equation we find that turnover ratio appears for all industries and corporate sector. The significant positive sign of the variable indicates the usual effect of the ratio on accumulation of debt capital. The liquidity variable is positive for sugar and tobacco and negative for engineering cement, PPP, EGS, trading, shipping and the corporate sector. The positive coefficient implies the preference for debt to maintain the liquidity position. The two industries, for which liquidity variable is positive, have debt as the main source whose proportion in total funds on an average has been more than 100 per cent (12, Misra, p. 21). The negative coefficient of liquidity variable indicates the usual accumulation of current assets through internal sources. The real risk variable R is negative for cotton textiles and trading and positive for EGS. 'More is the stability of earnings more is the preference for debt capital' is implied by negative sign of R.

textile industry

Cotton textile industry has more debt in its capital structure, whereas trading has more preference for debt (particularly short-term borrowings to finance current operations). For EGS industry the accumulation of debt capital (45%) has taken place because of increase in profitability, although unstable, and low financial risk. In tobacco, chemicals and shipping industries the increase in debt capital has been preferred for fixed assets expansion whereas engineering and PPP have favoured the accumulation of non-debt capital for expansion. As regards the inventory investment, the non-debt capital accumulation has been preferred for tobacco, chemicals, and EGS whereas more reliance is placed on debt capital in jute industry.

The tax variable in equation (1) has its usual positive effect on capital structure in favour of debt capital for sugar, cotton textiles and trading industries. Sugar and cotton textiles have debt as the dominant factor in their capital structure (12, Misra, p. 21) whereas trading industry has always preferred debt capital

because of high effective tax rate. For these three industries this tax rate is on an average more than 52 per cent which has made debt a relatively cheaper source. Equations (2) and (3) also support the positive effect of tax rate. The tax effect is negative on internal funds reducing non-debt capital in relation to debt for cotton textiles, and positive on debt flow increasing debt capital in relation to non-debt capital for sugar and trading industries.

Looking at equation (3) we find strong favourable effect of tax incentives on internal funds in cement industry and reductions in internal funds in engineering and EGS industries. The accumulation of internal funds has increased non-debt capital in relation to debt in cement industry. The increase in equity funds despite a downward change in internal funds has resulted in an increase in the net worth position in favour of non-debt capital for EGS and engineering industries. Cement, EGS and engineering are the three industries for which the tax rate has adversely affected debt outstanding to net worth ratio.

For the remaining industries namely; tobacco, PPP, EGS and shipping, there appears no change in proportion of debt capital, although either RED or DBTFLW has been affected by the tax rate. The same holds for the aggregate corporate sector. The finding is well supported by equations (2) and (3). Equation (2) is perfectly justified for the tobacco industry and corporate sector as a whole in giving tax induced favourable effect on debt because the proportion of debt has been of dominating character in 'finance mix' for tobacco industry and debt flow has been the main source of financing investment for the corporate sector. This change in the financial structure in favour of debt may be neutralized if equity funds increase in the same proportion as debt. There must be rapid increase in new issues for tobacco in which internal funds position has been unsatisfactory at least due to high effective tax rate. We find that over a period of 24 years there are three figures of new issues for the industry i.e. 30 in 1956-57, 95 in 1968-69 and 159 in 1972-73. Though this upward change is not continuous, net worth position has been improving despite the unstable position of internal funds. For the corporate sector as a whole, in which tax policy has no bearing on internal funds accumulation, net worth has increased steadily to neutralize the tax effect on the capital structure. The shipping industry, which is on the priority list from the very beginning, has been in a position to accumulate more internal funds due to the tax

TABLE I

'Capital Structure' Equation: Dependent Variable (DBTOUT/NW)

Industry	Constant	TAX/PBT	CA/TNA	S/K	R	I/K	INV/K	R^2	$\bar{R}^2$	DW
Corporate Sector	0.328	—	—0.018 (—2.105)	0.439 (11.860)	—	—	—	0.88	0.87	1.38
Sugar	—3.784	0.020 (2.011)	0.043 (2.126)	0.277 (3.793)	—	—	—	0.59	0.52	1.15
Tobacco	—2.857	—	0.037 (3.592)	0.104 (3.965)	—	0.956 (1.961)	—0.358 (—2.201)	0.88	0 85	1.56
Cotton Textiles	—1.711	0.005 (3.771)	—	0.487 (17.136)	—0.319 (—4.300)	—	—	0.94	0.93	1.28
Jute	—0.673	—	—	0.277 (12.460)	—	—	0.732 (4.404)	0.94	0.93	2.94
Chemicals	0.357	—	—	0.165 (5.086)	—	0.390 (2.162)	—0.575 (—1.778)	0.70	0.65	1.36
Engineering	3.016	—0.0 8 (—1.273	—0.037 (—1.821)	0.459 (5.389)	—	—0 818 (—1.874)	—	0.65	0.57	1.00
Cement	3.749	—0.004 (—1.142)	—0.012 (—1.688)	0.342 (11.834)	—	—	—	0.92	0.90	1.12
PPP	2.457	—	—0.049 (—6.187)	0.313 (2.555)	—	—0.357 (—1.511)	—	0.79	0.76	1.39
EGS	1.370	—0.004 (—1.763)	—0.042 (—4.912)	0.370 (13.534)	0.586 (2.013)	—	—2.036 (—1.611)	0.94	0.93	1.34
Trading	2.213	0.030 (1.988)	—0.052 (—1.630)	0.263 (5.388)	—2.408 (—2.810)	—	—	0.83	0.80	1.29
Shipping	1.749	—	—0.034 (—3.122)	0.383 (7.101)	—	0.112 (1.427)	—	0.91	0.89	1.53

*The figures in parentheses are t-values.

incentive. But decline in the new issue position has neutralized the tax effect on the capital structure. For PPP industry we observe the usual reduction in internal funds as a result of tax policy but the improvement in new issues over the period has been of an order to keep aside the disfavourable effect on retained earnings. Jute and chemicals are the only two industries in the set of chosen industries in which neither 'finance mix' nor 'capital structure' has been influenced by the tax policy.

The tax avoidance hypothesis may be regarded correct for most of the industries chosen and the aggregate corporate sector on the basis of the results of the study. The change in the 'finance-mix' has resulted due to adjustment of remaining burden of the tax on corporate earnings. The high rate of corporate income tax discriminates in favour of debt and thereby encourages the accumulation of debt capital and corresponding change in 'finance mix'. This argument is supported by the results for sugar, tobacco, trading industries and the aggregate corporate sector.

The existence of a variety of tax concessions in the corporate sector make the

TABLE II

Debtflow Equation Dependent Variable (DBTFLW/NW)

Voriables	Corporate Sector	Sugar	Tobacco	Cotton Textiles	Jute	Chemicals
Constant	0.062	—0.459	—2.151	0.579	0·631	0.119
(I/K)	—0.377	—0.174	—	—	—	0.547
	(—1·577)	(—1 687)				(9.436)
(INV/K)	1·365	0.552	0.214	0.598	0.319	—
	(4·271)	(22·376)	(3.634)	(5·387)	(1·264)	
(RED/NW)	—2.253	—	—	—0.873	1.289	—
	(—2.516)			(—3.742)	(2.128)	
(NI/NW)	—	—	—2.108	—	—	—
			(—1.380)			
(DBTOUT/NW)$_{-1}$	0.113	—	—0.149	—	—	—0.200
	(1·670)	—	(—2.462)			(—3·251)
(CA/TNA)	—	0.005	0.023	—0.007	—0.011	—
		(1.276)	(4·479)	(—2.186)	(—1·205)	
(TAX/PBT)	0·295	0.004	0.008	—	—	—
	(1·007)	(2.434)	(4.812)			
R^2, $\bar{R}^2$	0.72, 0.63;	0.97, 0·97;	0.84, 0·80;	0.69, 0.62;	0·76, 0.70;	0.83, 0·81
DW	2.85	2.50	1·52	1.86	2.39	1.68

Variables	Engineering	Cement	PPP	EGS	Trading	Shipping
Constant	0·058	—0·040	0.330	3.053	—0.544	0.064
(I/K)	0.163	0.382	0.223	0.518	—	0.395
	(1.588)	(3.409)	(2·357)	(3.491)		(8.064)
(INV/K)	0.543	0.350	0.597	—	0.372	4.614
	(6.143)	(2.020)	(2·041)		(1.691)	(1.212)
(RED/NW)	—	—	—0.781	—1.169	—	—0.955
			(—2.427)	(—2.394)		(2·706)
(NI/NW)	—1·186	0.311	—	—0.502	—	—
	(—2.254)	(1.044)		(—1.723)		
(DBTOUT/NW)$_{-1}$	—	—	—	—	—	—
(CA/TNA)	—	—	—0·006	—	—	—
			(—1.908)			
(TAX/PBT)	—	—	—	—	0.012	—
					(1.652)	
R^2	0.86	0.59	0.65	0·43	0.26	0.85
$\bar{R}^2$	0.84	0.52	0.57	0.33	0.18	0.82
DW	1.82	1.83	0·93	2.12	1.91	2 08

*The figures in parentheses are t-values.

TABLE III

Internal Funds Equation Dependent Variable (RED/NW)

Variables	Corporate sector	Sugar	Tobacco	Cotton textiles	Chemicals	Jute
Constant	0.019	—0.03	0.46	0.37	—0.293	—0.282
(PAT/K)	0.348	0.323	0.161	0.252	—	0.404
	(3.696)	(4.434)	(2.793)	(4.548)		(3.778)
(RED/NW)$_{-1}$	—	—	—	—	0.190	—
					(2.120)	
(I/K)	—0.049	0.155	0.180	0.274	0.222	0.249
	(—1.135	(4.757)	(4.934)	(9.719)	(8.916)	(7.130)
(INV/K)	0.200	—	—	0.054	—0.127	—
	(3.160)			0.204	(—0.566)	
(DBTFLW/NW)	—0.088	—	—0.043	—0.119	—	0.128
	(—2.340)		(—1.449)	(—2.234)		(2.912)
(NI/NW)	—0.287	—0.804	—0.337	—0.382	—0.601	—
	(—1.044)	(—1.343)	(—1.296)	(—1.034)	(—3.653)	
(DBTOUT/NW)$_{-1}$	0.042	0.032	0.027	0.042	0.122	0.027
	(5.645)	(3.449)	(2.682)	(5.738)	4.277)	(1.253)
(CA/TNA)	—	—	—	—0.006	0.005	0.004
				(—2.725)	(2.363)	(1.512)
(DPRCN/GFA)$_{-1}$	—	—	—	—0.817	—	—
				(—2.156)		
(TAX/PBT)	—	—	—0.0007	—0.005	—	—
			(—2.090)	(—2.485)		
R^2, $\bar{R}^2$,	0.95 , 0.93	0.76 , 0.73	0.9[, 0.87	0.98 , 0.97	0.96 , 0.95	0.97 , 0.95
DW	2.53	2.53	2.83	1.97	1.58	1.67

Variables	Engineering	Cement	PPP	EGS	Trading	Shipping
Constant	—0.012	0.361	—0.419	0.032	—0.316	0.031
(PAT/K)	0.220	0.656	—	0.315	—0.476	0.321
	(2.816)	(6.490)		(4.900)	(13.012)	(1.987)
RED/NW)$_{-1}$	—	—	—	—	—0.195	—0.225
					(—3.656)	(—1.331)
(I/K)	0.049	—	0.140	0.184	0.216	0.164
	(1.507)		(3.305)	(5.095)	(6.200)	(3.708)
(INV/K)	—	(0.365)	—	0.278	—	—
		(1.357)		(1.764)		
(DBTFLW/NW)	0.062	0.059	—	—0.127	—0.028	—0.293
	(1.841)	(1.284)		(2.344)	(—2.920)	(—2.427)
(NI/NW)	—0.490	—0.339	0.713	—0.136	—	—1.547
	(—3.476)	(—3.913)	(2.819)	(—1.957)		(—1.378)
(DBTOUT/NW)$_{-1}$	0.038	0.271	0.100	—	0.007	—
	(4.541)	(1.357)	(2.684)		(.460)	
(CA/TNA)	—	—	0.006	0.004	0.004	—
			(3.066)	(1.812)	(4.531)	
(DPRCN/GFA)$_{-1}$	0.231	—0.343	0.541	—0.364	—0.010	—
	(2.403)	(—3.184)	(2.546)	(—1.245)	(—1.633)	
(TAX/PBT)	—0.001	0.001	—0.002	—0.0004	—	0.002
	(—1.784)	(1.876)	(—2.130)	(—1.383)		(1 255)
R^2, $\bar{R}^2$	0.93, 0.89	0.91, 0.86	0.78, 0.69	0.91, 0.86	0.97, 0.95	0.78, 0.67
DW	2.34	1.62	2.50	2.52	2.21	2.34

*The figures in parentheses are t-values.

accumulation of internal funds more convenient and therefore may change capital structure in favour of non-debt capital. The shipping and cement industries are the examples. It is not only tax induced lower cost of debt capital in relation to equity which induces more accumulation of debt, but also reduction of internal funds made possible by a higher tax rate. For cotton textile industry the proportion of debt has changed favourably, although debt-flow is not directly affected by the tax.

Thus under the present structure of the corporation income tax, higher effective tax rate has changed the capital structure in favour of debt capital for the industries in the non-priority sector. The finding seems to be supported by most of the industries not covered under the study as indicated by the results of aggregate corporate sector whose 'finance mix' has tax induced debtflow. For industries in the priority sector, there is change in capital structure but not in favour of debt. Therefore on the whole, the observed shifts in the 'capital mix' appear to be tax induced indicating significance of tax policy. Thus there is need for an appropriate fiscal policy to bring at least required changes in the capital structure as a solution to the problem of credit squeeze.

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1. Particularly licensing policy of the government has been responsible (1, Bhagwati & Desai).

2. The third proposition under M.M. hypothesis implies that inverstment decisions are independent of capital structure (13, Modigliani & Miller, p. 288).

3. The cost of capital is determined by capital structure according to classical proposition. The cost of capital is used as discount rate to calculate the present value of the firm, given a stream of future returns. Thus investment decisions depend upon capital structure (5, Fama; 4, Dhrymes & Kurz). There are studies in India in which classical phyothesis has been found correct (8, Krishnamurty & Sastry; 15, Rao & Misra).

4. The tax policy influences investment decisions positively by improving the funds position. This may be due to reduction in after tax cost of debt capital and favourable incentives which improve liquidity position. The adverse effect is possible if incentives are weak and internal funds and equity funds are significantly reduced. Investment depends upon funds availability (12, Misra).

5. In the Indian corporate sector, most of the companies have been in a position to shift the tax burden only partially (10, Misra).

6. "The observed shift in the capital mix does not appear to be of tax induced type" (16, Rao & Rao, P. 24).

7. The terms "finance mix", "financial structure" and "capital structure" have been used to mean the same thing in other sections. although "finance mix" or "financial structure" represents the combination of three types of funds and capital structure indicates the distribution of cumulated funds in liability structure.

8. The tax variable is current effective tax rate whose inclusion in all three equations may not stand free from criticism. This does not represent any strong drawback in the model because : (1) the equations (2) and (3) follow adjustment mechanism in debt flow and gross internal funds respectively.

$Xt - Xt\text{-}1 = d\ (Xt^* - Xt\text{-}1)$, where Xt represents RED and DBTFLW for current period and Xt* is desired level of these variables. The appearance of lagged debtflow together with debt outstanding lagged by two periods is implied by dept outstanding lagged by one period in equation (2). The desired level of funds depends upon tax rate for the same period together with other factors; (ii) the inclusion of tax rate lagged by one period, which has been considered in some studies (16, Rao & Rao), is not free from criticism because it is very difficult to determine the appropriate lag structure of the model. The distributed model itself is not a good choice due to several statistical problems.

9. Since internal funds give rise to reserves on liability part of the balance sheet account, therefore net worth appears to be appropriate choice for deflation of RED in order to maintain consistency. DBTFLW and NI are also deflated by NW (18, Sastry).

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Technocrats: a new class of entrepreneurs

S. R. Subba Rao

There has of late been a spate of advertisements by lending institutions promising liberal financial assistance to technocrats. Howsoever technically well qualified the entrepreneur is, managerial competenc is essential for running a unit successfully, says the author, who is a member of Faculty, Southern India Banks' Staff Training College, Coimbatore. He feels that Industries departments of state governments should make efforts to educate the prospective entrepreneurs and create an awareness in them of the significance of managerial skills to save them from failures.

IN RECENT years, a new class of entrepreneurs, viz., technocrats, has emerged in this country in the small-scale sector. These entrepreneurs are technically qualified, which is considered an advantage in running an industrial unit. Assistance is available to them from different quarters in the form of basic training for setting up industrial units, finance and guidance in formulating, implementing and running the projects. They get preferential treatment, on concessional terms, over non-technocrats. This is a desirable development. The supply of technically qualified persons in India is so large that many are unemployed. They have now an opportunity of standing on their legs.

It is obvious that the various facilities/ incentives provided to the technocrats should result in economic benefits to the nation outweighing the relevant costs involved. Otherwise protectionism is not a sound policy. It could be easily gathered from published reports that all is not well with many technocrats. In the case of failures the reasons attributed are: managerial incompetence, labour problems, inadequate finance, scarcity of raw materials and intensive competition in the product market. This is a matter of concern. There is need to go into the root causes of these problems so that remedial steps are taken in time.

However technically well qualified the entrepreneur is, managerial competence is essential for running the unit successfully. In fact, commendable efforts are being put in by various institutions (e.g., the Small Industry Extension Training Institute and small industries service institutes) to impart this skill to the prospective entrepreneurs who are technically qualified. But, only a few get the opportunities of exposure to such training. How about the rest?

managerial skills

In the case of prospective entrepreneurs, the solution seems to lie in creating an awareness in them of the significance of managerial skills. Industries departments of the state governments (which are the essential contact points) may prepare a brochure on the importance of these skills and supply them to the prospective entrepreneurs when approached. Some illustrations of failure of entrepreneurs, because of managerial incompetence. could be given in it. Further, before considering their applications for the sanction of licences, an objective type of test (which does not take more than 30 minutes) could be administered in the area of management, by the Industries department. This could be done as and when the applicants come, since the time involved is not much

If the existing units have any management problems (including labour trouble), the entrepreneurs should approach consultants. The Industrial Development Bank of India helps in the selection of consultants. If there is any hesitation in this regard, it may, perhaps, turn out to be suicidal. It is noteworthy that the State Bank of India has established free consultancy cells at different centres in the country for assisting the small scale industrialists. About 1.6 lakhs of entrepreneurs received assistance so far through these cells.

We see a spate of advertisements of lending institutions promising liberal financial assistance to technocrats. Actually, the amount lent by them also is significant in quantitative terms. For instance, from the state financial corporations 2171 technocrats had received an amount of Rs 40 crores by the end of March 1977. The rate of interest varies between 8 and 9.5 per cent per annum They also provide seed capital assistance (contributed in an agreed proportion by Industrial Development Bank of India and the concerned state government) to the technocrats up to a miximum of 20 per cent of the project cost or two lakh rupees whichever is lower. The loans given are interest-free and carry a service charge of one per cent. Initial moratorium is given up to five years depending upon the repaying capacity of the unit.

concessional interest rate

Commercial banks lend funds to technocrats at a concessional rate of interest which is normally the minimum lending rate of 12.5 per cent per annum. In deserving cases they waive margin requirements too. Further, the State Bank of India set up in 1977 a research and development fund of five crores of rupees for assisting entrepreneurial development.

In order to encourage the credit institutions to provide liberal finance to technocrats, the IDBI provides refinance assistance to them for such lending. The rate of interest charged is 7.5 per cent per annum and the credit institutions charge from the borrowers in turn a higher rate not exceeding 3½ per cent over the IDBI rate. By the end of June 1977, the total refinance assistance given amounted to Rs 14 crores, the beneficiary units being 780 in number.

Under the interest subsidy scheme of the government of India the technocrats (who have completed the training programmes sponsored by the ministry of Industrial Development at specified institutions) are eligible for assistance at a

subsidised rate of interest of five per cent per annum. The quantum of subsidy given is a maximum of Rs 20,000 per annum, available for three years. This assistance is in respect of their borrowings towards fixed capital.

Assistance is also available to technocrats from the national and small industries corporations (for acquisition of machinery on hire purchase basis at an interest rate varying between 9 and 12 per cent per annum) and state industrial development corporations (by way of construction of sheds which are allotted on rental or hire purchase basis at subsidised rates).

With all this, if some technocrats experience inadequacy of finance the main reasons could be two. First, the assessment of credit needs on the part of credit institutions is not need-based. Second, there may still be emphasis on security which many entrepreneurs may not be able to offer.

Efforts are made by the managements of lending institutions to equip their concerned officers with requisite skills to assess the credit needs of borrowers scientifically and in precise terms. The problem seems to lie on the approach to lending.

Though there is great emphasis on the economic viability and technical feasibility of the units as the criteria for lending, much headway is not made in this respect in most of the lending institutions. Their top managements should instruct the heads of the departments/cells of advances to follow purpose-oriented approach. This does not mean that security is not to be taken. But it is relegated to secondary position.

Then we come to the problems of scarcity of raw materials and competition faced by the technocrats. The growth in the number of small-scale industrial units is at a faster rate compared to the rate at which supplies of raw materials are increasing. The problem is severe in cases where there is a decline in the quantum of raw materials in supply, and more so when they are to be imported. Again, in the product market the severity in competition is giving unduly an upper hand to the buyers. Even if the quality of the products is good, without vigorous advertisement and publicity (which are expensive) the units may not be able to lift their stocks. These problems lead to another one, viz., escalation in the cost of production, there being at the same time no scope for increasing the product prices. The result is entrepreneurs may be incurring losses or left with unremunerative profit margins.

To overcome these difficulties, the industrial licensing policy needs to be modified. The licences are to be issued in a restricted manner if the proposed units need raw materials which are in scarce supply and if there is already an intense competition among the existing units manufacturing the concerned products. In the absence of this, because of the entry of new units, the raw material scarcity will get aggravated and unhealthy practices will get perpetuated in the product markets. The technocrats entangled in these situations would not be able to revive their units.

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Economic summit : some modest trade-offs

Sudhir Sen

The 31-para summit declaration made at the two-day economic summit meeting in Bonn recently looks both solemn and credible but its hard core is a trade-off between the USA on the one hand and West Germany and Japan on the other, says the author. Chancellor Schmidt and premier Takeo Fukuda have made modest commitments to improve their growth rates in return for a pledge by president Carter to reduce energy imports. But the odds are that for several years this pledge will make no noticeable difference to US oil import bill and the multiple malaise that flows from it.

THE TWO-DAY economic summit meeting held in Bonn (16-17 July) ended on a rather upbeat note; there was no trace of the pre-summit bickerings that, for a while, had threatened to undercut the parley. The discordant voices were ultimately mellowed and strenuously harmonised, even if perhaps only superficially. The leaders were gratified with their own achievements as, indeed, they had good reason to be.

President Carter lost no time in declaring that he was "very pleased with the results". Chancellor Helmut Schmidt of West Germany, prime minister James Callaghan of Britain and others shared the same feeling; the results were better "than expected", they said. Prime minister Takeo Fukuda of Japan, however, put on a different mien, apparently troubled by the stubborn realities his nation was grappling with, so far without much visible success. Unsmiling and tight-lipped, he sounded a note of caution: "We must not expect any miracles here. What we are after is simply that we should stop castigating one another and criticising each other."

The summit has submerged its differences and called a truce. But will it last? How deeply entrenched are the divergences among the top industrial leaders can be gauged from the views that were acrimoniously aired by them on the summit eve. Chancellor Helmut Schmidt, in tactful and not-so-tactful language, left no doubt that it was the USA that in effect held, the key to a worthwhile summit accord; that its commitment to tackle the problems of inflation, oil imports and dollar decline would be the most decisive factor since it would, in turn, determine, the response from others. While West Germany was criticised, by the USA and Britain in particular, for its reluctance to expand its economy, the chancellor Schmidt put the blame squarely on the USA whose balance-of-payments deficit unsettled the world's currency markets and made it all the more difficult for West Germany to pursue a policy of more rapid, but non-inflationary economic growth.

WINDOW ON THE WORLD

President Valery Giscard d'Estaing, in a newspaper interview given around the same time (on 11 July), echoed a virtually identical view. "An important reduction in United States oil imports", he observed, "was the precondition for an improvement in the world economy". This was obviously designed as an advance warning to president Carter. When reminded that in a year of mid-term elections, the Congress was opposed to higher oil prices that would result from import curbs, the president replied tartly, "American internal politics are no concern of ours."

frontal attack

Much more surprising, however, was a frontal attack on US policies that came, of all countries, from Japan. In a widely publicised interview, Mr Kiichi Miyazawa, the head of Japan's Economic Planning Agency, expressed "great disappointment" that president Carter seemed to be going to Bonn "empty-handed"; accused the US Congress of "dragging its feet on the energy bill", although this was "long overdue" under the agreement reached in January last between Japan's minister of External Economic Affairs, Mr Nobuhiko Ushiba, and president Carter's chief trade negotiator, ambassador Robert S. Strauss; and underlined his apprehension of a protectionist trend in the United States after elections this fall. Mr Carter and Mr Strauss were really "unfortunate" since they had "nothing to give" at Bonn, it was "all take". To achieve any positive results president Carter, he insisted, would have to tell the Bonn meeting that "*by a certain date* the US will have its own comprehensive energy programme".

Then, in what was a most extraordinary utterance, he told the reporter that the American economy was being "mismanaged". "Not only does your government have the energy bill to complete," he said, "but you have a big budget deficit of $60 billion, which is going to climb further and you now have an inflation rate of seven per cent which is also going up." Was it not "unusual", or "un-Japan-like", for a Japanese minister to criticise the USA in such a blunt fashion? If he were in the Foreign ministry, Mr Miya-

zawa explained, it might be a different affair, but from his present position he could "speak frankly".

The significance of this interview lies in the fact that Mr Miyazawa is not only a former Foreign minister, but he is generally believed to be the man who runs the economy for prime minister Takeo Fukuda. Was it, then, Mr Fukuda himself who was speaking his mind through his righthand man? The answer, it is generally believed, is 'yes'. Did the Fukuda government decide to act on the maxim that attack is the best defence—especially after it had been constantly under fire because of its soaring trade surplus which, for the fiscal year ending in March 1979, is estimated to reach a stunning total of $23 billion with the world, more than half of it being with the USA? Again, the consensus answer is apparently 'yes'.

Meanwhile, the Carter administration, too, decided to change its tactic and, as part of its preparation for the Bonn meeting, went on the offensive. The latest trade statistics, it held, revealed a dramatic shift in the import pattern. Oil was no longer the topmost category of import; instead, it was pushed to the third position and came after the imports of machinery and manufactured goods. In the first five months of 1978, as compared with ths corresponding five-month period of 1977, the changes were (in billions of dollars): a rise from $14.1 to $19.1 for machinery imports and from $13.1 to $19.2 for imports of manufactured goods, whereas the figures of petroleum imports dropped from $17.6 to $15.9.

passing the buck

Some Carter aides believed that, armed with these statistics, the president could switch tactics and tell the Europeans and the Japanese that the flood of industrial goods from their countries, rather than oil, was causing the huge trade deficit in the United States and the consequent decline of the dollar they lamented so much. It was their hope that they could thus pass the buck on to their adversaries, telling them—especially the West Germans and the Japanese—that the realistic choice before them was either to stimulate their lagging economies and to expand their imports or to risk a shrinkage of their exports, especially to the United States.

For the US angle this might be a good debating point, although its effect could be easily exaggerated. After all, five months are too short a period; the drop in the oil import bill is too small—in absolute terms, it is still staggeringly high and may again resume its uptrend. Besides, that there is a colossal waste of energy in the United States is a long-established fact. Mr Carter himself launched a crusade against it soon after moving into the White House. He could hardly turn his back on it because of a small decline in oil imports over a five-month period at a time of slackened economic activity.

formidable problems

These background facts should be enough to illumine the formidable character of the problems that awaited the seven leaders at the summit. It would have been too much to expect that they could weld their widely varying views and conflicting interests to hammer out, in two days' discussion, a cohesive, meaningful programme for the benefit of the world economy. What they did instead was, first, to define some common goals, but keeping the sights deliberately low; second, to make a commitment to their realisation, again in quite general terms; third to spell out the specific contributions each would make towards that end, but taking good care that they were couched in acceptably flexible terms and did not go too far beyond the limits each government had already set for itself; and finally, to hedge the most imoprtant commitments with enough caveats so as to protect national interests and to forestall the risk of possible blame in case of future default. These are the hallmarks of the declaration which was issued from the summit as its handiwork at the end of the two-day palaver. Perhaps this was the best one could expect from it, given the need to find the broadest common denominator to accommodate their clashing interests What practical value it will have is, of course, a different matter.

The participants agreed on a "comprehensive strategy" covering growth, employment and inflation, international monetary policy, energy, trade and other issues of particular interest to developing countries. Such a strategy, they stressed, was needed to create more jobs and fight inflation, to strengthen international trading, reduce payments imbalances and achieve greater stability in exchange markets. They recognised that these were "long-term problems" that called for "sustained efforts". They also hold that this strategy was "a coherent whole, whose parts were interdependent"; that each country could contribute to it, just as each could also benefit from it. All this sounded like noble platitudes, sufficiently innocuous, so that every member could subscribe to it without demur.

Moreover, significant concessions were made to the German-Japanese view-points. For example, the need for growth was emphasised to create employment and reduce protectionist pressures. But an "improvement" in growth, it was explicitly stated, had to be achieved "without rekindling inflation". Similarly, the extremes of balance-of-payments surpluses and deficits had to be reduced, which would also "reduce destabilising exchange rate movements".

steady growth

To assure "steady non-inflationary growth" different actions were needed from countries facing different conditions. This means that countries with comfortable balance-of-payments position and not unduly exposed to inflationary pressures should act to bring about a faster rise in domestic demand, while those, already suffering balance-of-payments and inflationary strain should gear their efforts to combat inflation and bring their economies in better balance. West Germany and Japan, needless to say, fell in the first category while the other five, led by the USA, fell in the second.

The declaration set forth in some detail what measures each of the seven nations would adopt for inflation-fighting, job creation and balanced growth. On the surface, the specifics taken in their totality look quite impressive. In fact, however, they represent more or less what each country was already doing or was planning to do in the near future. Thus, according to the script, the USA would continue its

fight against inflation through budget-tightening and other measures, and would exert itself to shrink its payment imbalance; Canada reaffirmed its intention to increase the output by about five per cent to create jobs, subject to the need to contain and reduce inflation; Britain announced that it would stay on the course already chalked out, namely, apply a fiscal stimulus equivalent to about one per cent of GNP, now that both its inflation and trade deficit had been substantially reduced; France agreed, as a contribution to the common effort, to increase the budget deficit in the current fiscal year by an amount of about 0.5 per cent of GNP while pursuing its policy of reducing inflation; Italy indicated its plan to raise the economic growth rate by 1.5 per cent from the current year's level, by cutting public expenditure and stimulating investments in order to create more jobs but without refuelling inflation.

significant concessions

Of far greater significance are, of course, the plans of West Germany and Japan, the two other industrial giants of the democratic world. Both made some significant, but carefully qualified concessions. The German delegation indicated that, in order to avert the world-wide disturbances of economic equilibrium, it would "propose" to the legislative bodies substantial measures up to one per cent of GNP, designed to achieve a significant strengthening of demand and a higher rate of growth. Then followed the caveat: "The order of magnitude will take account of the absorptive capacity of the capital market and the need to avoid inflationary pressures." The caveat contains the conditions which have hitherto largely dictated West Germany's economic policies. Will the policy shift now announced founder also on the same conditions?

The prime minister of Japan pointed out that his government was striving to attain a real growth target in fiscal 1978 which would be about 1.5 per cent higher than last year's, mainly through an expansion of domestic demand, and that, if necessary, additional measures would be taken in August or September to achieve that goal. Sceptics will recall the wide margin by which Japan's actual performance last year fell short of the real growth target it had announced at the London summit of May 1977. And so they would presumably like to wait and see how its performance matches the commitment it has freshly made at this year's summit.

specific commitments

As for energy, the brunt of the battle naturally fell on the USA and president Carter found himself in an unenviable position. He knew only too well that the fate of the conference itself would hinge on his ability to satisfy his summit partners on this crucial issue and that the only way out from his beleaguered position was to give some clear-cut pledges that would be acceptable to them. Accordingly, he made several specific commitments based largely on his energy programme: By year-end, he announced, measures would be in effect that would lead to a saving of about 2.5 million barrels of oil imports per day by 1985. To achieve these goals, the USA would establish a strategic oil reserve of one billion barrels, increase coal production by two-thirds, maintain a ratio of 0.8 per cent or less between the growth of energy demand and the GNP growth, and ensure that oil consumption would grow more slowly than overall energy consumption; import less oil in 1978 and 1979 than in 1977; and raise the domestic oil price to the world level by the end of 1980 in order to curb excessive consumption of oil and encourage its replacement by coal.

The leaders reaffirmed their determination to expand international trade and to fight protectionism, whether open or concealed; stressed the need for heavily trade-deficit countries to spur their exports, just as those with large surpluses should encourage imports; expressed their desire to allow "better access" to their markets for the products of the developing countries and to increase the flow of assistance to them, especially to those most in need. They also recognised the damaging effects of erratic exchange rate fluctuations on confidence, investment and growth of the world economy, and underscored their belief that the best hope for greater exchange stability lay in carrying through the concerted programme they had outlined.

The 31-paragraph summit declaration, ostensibly covering a wide field and embellished with a lot of statistics to make it look both solemn and credible, can hardly mask a bald truth: that its hard core is a trade-off between the USA on the one hand and West Germany and Japan on the other. Simply put, in exchange for president Carter's pledges to reduce energy imports, chancellor Schmidt and prime minister Fukuda have made modest commitments in rather elastic terms to improve their growth rates by stimulating domestic demand. And herein lies a fatal weakness.

For, the pledges Mr Carter has readily given to his impatient partners are decidedly modest; even if fulfilled in toto, the odds are that, for several years, they will make no noticeable difference to the USA's oil import bill and the multiple malaise that inexorably flows from it. Worse still, the measures he has promised to take are only a capsule version of the comprehensive five-part energy programme which has been stalled in Congress for fifteen months. It seems most unlikely that he will be able to deliver on his promises, far less by the deadline he has set for the purpose. In other words, the fragile package of understanding laboriously put together at the summit, may soon lose its linchpin. If this happens and the package begins to fall apart, we may be treated to a fresh round of controversy among the industrial leaders while the world economy suffers another sinking spell.

Announcement

M/s. Saurabh Pustak Bhandar, Ahmedabad, have been appointed as one of our Subscription Agents.

Necessary enquiries may please be made to:-

Saurabh Pustak Bhandar

615, Relief Road, First Floor,
Near Calicodome,
AHMEDABAD-380 001
Phone No. 31230

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(Incorporated on June 10, 1

REGISTERED OFFICE : 69, Desh

Announcement Regarding Issue of 3,60,00

Persons interested in details may please obtain copies of the Prospectus and Application Forms from t to the Issue mentioned herein.

The subscription list will open at the commencement of banking hours on Wednesday the 16th August Board of Directors of the Company but not before the close of banking hours on Friday the 18th Augu

Applications have been made to the Stock Exchanges at Delhi and Bombay for permission to deal in and for an of

HISTORY AND BUSINESS OF THE COMPANY

The Company was incorporated on 10th June, 1974 in the Union Territory of Delhi. The Certificate of Commencement of Business was obtained on 2nd August, 1974 from the Registrar of Companies, Delhi and Haryana at New Delhi. The main objects of the Company as set out in the Memorandum of the Company are *inter alia*, manufacture and sale of sheet glass in various thickness, in plain, white and in Light Tints.

PROMOTERS & MANAGEMENT

The project is being promoted by Sarvshri R. S. Khemka, S. R. Modi, T. L. Arora and A. K. Jajoo. Shri Khemka has practical experience of several years in glass industry and trade. The management of the Company vests with the Board of Directors comprising of experienced businessmen.

PROJECT

The Company is setting up a manufacturing unit in the District of Sonepat, Haryana with an installed capacity of 2.81 million sq.mts. (on 2mm basis) of sheet glass per annum.

PRESENT STATUS

The Company has already taken possession of the land and civil construction thereon is in progress. Part of the Electrocast Refractories and special clay have already reached at the site. Orders for most of the major machinery imported and indigenous have also been placed. Barring unforeseen circumstances, commercial production is expected to start by October, 1978.

COST OF THE PROJECT

The total cost of the project has been estimated at Rs. 165 lacs and will be met as under

Equity Share Capital	Rs 60 lacs
Term loan from financial institutions; namely IDBI, IFCI & ICICI.	Rs. 105 lacs
	Rs. 165 lacs

SHARE CAPITAL

AUTHORISED		Rupees
7,50,000	Equity Shares of Rs. 10/- each	75,00,000
ISSUED, SUBSCRIBED & PAID UP		
700	Equity Shares of Rs. 10/- each allotted as fully paid up for cash at par to the Signatories to the Memorandum & Articles of Association.	7,000
2,39,300	Equity Shares of Rs. 10/- each allotted as fully paid up for cash at par to the Promoters/ Directors, their friends and associates.	23,93,000
2,40,000		24,00,000
NOW OFFERED TO THE PUBLIC FOR SUBSCRIPTION FOR CASH AT PAR, IN TERMS OF THIS PROSPECTUS :		
3,60,000	Equity Shares of Rs. 10/- each	Rs. 36,00,000

TERMS OF PAYMENT :

On Application	Rs. 2.50 per share
On Allotment	Rs. 2.50 per share

The balance of Rs. 5/- per share shall be payable in two or more calls as may be determined by the Board of Directors of the Company and in such manner that there shall be an interval of one month between the allotment and first call and between two calls. At least 30 days notice shall be given by the Company in respect of every call.

BUSINESS PROSPECTS, PROFITABILITY AND DIVIDEND

Vertically drawn sheet glass, representing the result of more than 70 years of glass manufacturing, is exceptionally clear and has a natural surface finish. Its main uses are glazing windows, covering pictures, photographs, maps and prints, projector slides, shelving, display cases, ventilators, instrument dials and furniture tops, etc. In modern construction and display windows, the use of sheet glass is increasing day by day. It is thus expected that there will be a steady rate of growth in the industry. At present there are 7 units in the country who are engaged in the manufacture of sheet glass having combined installed capacity of around 30·20 million sq. mts. (on 2 mm basis). According to the market survey conducted by the Company and the general pattern of demand, it is estimated that a total quantity of 33 million sq. mts. will be required by 1978. At present, there is no other sheet glass manufacturing unit in the North and the Company is confident of filling this gap. The directors are confident that the production from the unit will find a ready market.

The Directors are of the opinion that barring any unforeseen circumstances, the company will be in a position to declare dividend on Equity Shares within a reasonable period after the commencement of commercial production.

BOARD

R. S. KHE
2/73, Roop
R. R. PAR
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Bombay-4
S. R. MOD
8, Rajpur
T. L. ARO
60, High S
England
R. S. RAS
1434/35 G
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39, The M
FACTORY
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Haryana-1
AUDITOR
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ISSUE OPENS ON 16.8.1978 **ISSUE CLO**

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et Glass Limited

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u Gupta Road, New Delhi-110 055

ity Shares of Rs. 10/- each for cash at par.

ered Office of the Company. Underwriters, brokers to the Issue and any of the branches of the Bankers

will close at the close of banking hours on Monday the 28th August 1978 or earlier at the discretion of the

ation for the Equity Shares of the Company.

ECTORS

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Amount Underwritten (Rs. in lacs)	
	Punjab National Bank 5, Parliament Street, New Delhi-110 001
2.0	
	The New Bank of India Ltd. 1, Tolstoy Marg, New Delhi-110 001
2.0	
	Bharat Bhushan & Co., H-45, Connaught Place, New Delhi-110 001
0.5	
	P. S. Khambete & Co., M-45, Connaught Circus, New Delhi-110 001
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Rs. 27.0	

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In the event of public issue remaining undersubscribed, the Promoters will subscribe to the unsubscribed portion of the Equity Shares to the extent of 90,000 Equity Shares of Rs. 10/- each now being offered to the public but have not been underwritten. No underwriting commission and/or brokerage will be payable to them in respect of such shares. In the opinion of the Board of Directors, the resources of the underwriters are sufficient to enable them to discharge their respective underwriting obligations in full.

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After obtaining Application Form(s), complete and Sign. (applications must be for 50 Equity Shares or multiples thereof) and deliver together with cash/bank draft/cheque @ Rs. 2.50 per Equity Share to any of the branches of the bankers mentioned on the application form.

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STATE BANK OF INDIA
Merchant Banking Division

ON 28.8.1978 BUT NOT BEFORE 18.8.1978

Switzerland and the hard franc

Hans Hartung

On Swiss day at the industrial fair in Hanover (April 20, 1978), Hans Hartung, Member of the General Management of Credit Suisse, delivered an address entitled 'Switzerland and the hard franc'. In view of the widespread interest aroused by this analysis, Credit Suisse has published the talk in a slightly expanded version which includes background statistical material. Eastern Economist *is reproducing Mr Hartung's address in view of its relevance to the current ferment in the currency markets.*

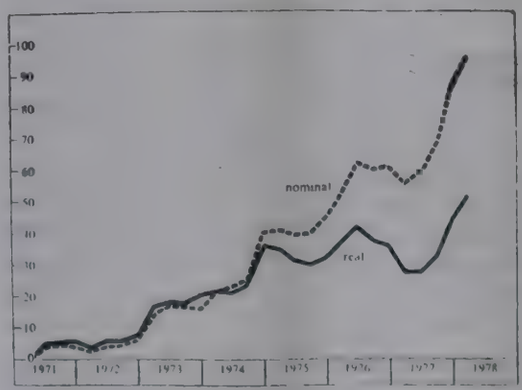
ALMOST EXACTLY 160 years ago Czar Alexander I sent 100,000 silver roubles to Switzerland to relieve the economic distress of the starving population. Today the situation has changed. What was once a poor under-developed country has become, despite its dearth of raw materials, a rich industrialised nation.

This rise from poverty to prosperity is the fruit of many decades of genuine effort. Statistically, however, it has only become fully evident as a result of the massive appreciation of the franc since 1970. To cite just a few figures, since the end of 1970 the franc has increased in value against the leading international reserve currency, the US dollar, by 132 per cent, against the yen by 43 per cent, against the pound sterling by 197 per cent, and even against the hard German mark by 28 per cent. When the appreciation is weighted according to the regional structure of Swiss exports, the average exchange rate of the franc is found to be nominally twice as high today as it was seven years ago: one 1970 franc is now worth two francs in international transactions. Such a growth in value has never before been experienced in so short a time by any other currency in the world.

The appreciation of the franc against individual currencies and also against the average of the fifteen major trading partners occurred in several distinct phases. Following the first revaluation of the franc in May 1971 and the readjustment of parties under the Smithsonian agreement in December of the same year, there was no significant shift in exchange relations up to the end of 1972. But the floating of the exchange rate in January 1973 led to a marked upward movement, which apparently corrected the franc's previous undervaluation. This second phase reached its climax in June 1973.

As a result of Switzerland's success in coping with the oil crisis, a third phase of appreciation occurred in late 1974 and early 1975. The crisis surrounding sterling, the lira and the French franc triggered a fourth phase in the spring of 1976. The fifth and latest phase began with the slide of the dollar in mid-1977, reaching its peak at the end of February 1978 and leading to a tightening up of the protective measures against the inflow of foreign funds, which had first been introduced as far back as 1971. These developments are shown in graph given below.

Rate of Change of Swiss Franc vis-a-vis Currencies of 15 Major Trading Partners
(Base 5.5. 1971=100)



These are the monetary events that form the background to what is commonly referred to outside Switzerland's borders as the 'Swiss economic miracle'. The allusion is to the fact that despite the massive appreciation of the franc Switzerland is evidently prospering. The country has an unemployment rate of only 0.4 per cent of the labour force, a situation which anywhere else would be regarded as one of overemployment. Moreover, inflation, which in 1974 rose to an annual rate of 10 per cent, has been almost completely eliminated. Furtermore, the growth in real Gross National Product in 1977, at 4.3 per cent outstripped that of every other European nation, whereas in 1975 Switzerland had experienced the worst recession of any country, with a drop in GNP of 7.6 per cent. Even the earnings position of Swiss companies, which had at times been far from satisfactory, improved somewhat in 1976-77. This emerges from an analysis of the results of 20 large Swiss firms. Whereas in the recessionary year 1975 their net profits had amounted to only 1.0 per cent of turnover, this percentage rose in 1976 to 1.2 per cent, matching the level of the early 1970s and it has undoubtedly continued to improve in 1977 (Table I).

TABLE I
Turnover and Net Profit of 20 Major Swiss Firms

	Turnover (in mill. Sfr.)	Net profit (in mill. Sfr.)	Net profit as per cent of turnover
1970	120,806	1602	1.33
1971	146,678	1672	1.14
1972	155,930	1924	1.23
1973	157,165	2414	1.54
1974	168,750	2512	1.49
1975	189,950	1962	1.03
1976	207,464	2425	1.17

In the export sector, which is the mainstay of economic activity in Switzerland, new records were achieved in 1977 despite the strength of the franc. Exports rose by 14 per cent in value and by 12 per cent in volume, resulting in another substantial current account surplus of Sfr. 8.5 billion. Comparative results over several years also demostrate the amazing resistance of the Swiss export industry. From 1973 to 1977 Swiss export volume increased at an above-average rate compared with major

industrialised nations in every year save 1973. This can be seen in Table II. Thus Switzerland's share in world exports rose between 1974 and 1977 from 1.5 per cent to 1.7 per cent. (Table III)

At the same time the trend towards a shift in the regional pattern of trade flows, which had already been observable in the preceding two decades, continued. Trade with western European industrialised nations intensified, while that with non-European industrialised countries declined. One notes in particular that imports from the USA declined, despite the weakness of the dollar. Conversely, there was also a relative reduction in exports to the USA, as was theoretically to be expected. A trend in this direction was already observable in 1960s, i.e. before the appreciation of the franc, as Table IV shows. In trade with developing countries the course of imports likewise ran parallel to that of exports. While trade with Asia, especially Japan and the OPEC nations expanded, that with South American developing countries in the dollar area declined. A marked increase has been recorded during recent years in the share of planned economy countries in Swiss exports. From 1974 to 1977 their share averaged 7.5 per cent, about twice as high as at the beginning of the 1960s. This is a clear indication of the efforts made to promote Switzerland's vital export sector, not least by the government and the banks.

TABLE II

Growth of Export Volume Compared Internationally

	1973	1974	1975	1976	1977
	as compared to previous year (%)				
USA	23.5	9.0	— 2.6	3.6	1.8
Japan	7.0	15.6	0.7	21.8	5.5
France	10.5	9.7	— 4.8	8.5	6.3
Germany, West	18.5	13.2	—10.4	12.4	5.0
Italy	6.0	7.5	2.2	11.7	7.0
Britain	11.5	5.0	— 3.7	7.4	10.5
Switzerland	**9.5**	**11.4**	**3.2**	**11.5**	**10.0**
OECD	14.5	7.5	— 5.0	10.6	4.8

Source : OECD

TABLE III

Switzerland's Share of World Trade*

	Exports fob			Import cif		
	CH mill. $	World	Share CH in %	CH mill. $	World	Share CH in %
1960	1,859	114,700	1.62	2,206	120,000	1.84
1961	2,018	119,700	1.69	2,663	125,500	2.12
1962	2,191	125,400	1.75	2,970	132,800	2.24
1963	2,388	137,600	1.74	3,199	144,600	2.21
1964	2,621	154,200	1.70	3,554	162,100	2.19
1965	2,941	167,500	1.76	3,642	176,100	2.07
1966	3,248	183,900	1.77	3,888	193,900	2.01
1967	3,468	192,900	1.80	4,068	203,190	2.00
1968	3,968	215,400	1.84	4,443	226,400	1.96
1969	4,576	246,800	1.86	5,198	258,200	2.01
1970	5,063	283,500	1.79	6,374	297,100	2.15
1971	5,738	317,600	1.81	7,191	332,200	2.16
1972	6,842	376,000	1.82	8,468	388,400	2.18
1973	9,525	524,200	1.82	11,621	534,800	2.17
1974	11,934	771,890	1.55	14,445	786,040	1.84
1975	12,953	795,700	1.63	13,303	815,740	1.63
1976	14,835	906,000	1.64	14,775	926,820	1.59
1977	17,614	1,021670	1.72	17,940	1 049,640	1.71

*Without Comecon and the People's Republic of China

rise in exports

These efforts are also reflected in the share of merchandise exports in Switzerland's Gross Domestic Product; it rose from 28 per cent at the start of the 1970s to 34 per cent in 1977. The combind share of merchandise and service exports in GDP increased between 1970 and 1977 from 33 per cent to 42 per cent. (Table V). By contrast, the growth in the import share in GDP was smaller, namely from 35 per cent to 41 per cent. It is noteworthy that since 1973, despite appreciation, average export prices have risen by 32 per cent. As average import prices have increased over the same period by only 27 per cent, the result has been a slight improvement in Switzerland's terms of trade: Switzerland today needs to export less goods in order to pay for the same quantity of imports. In other words, the real income of Switzerland from foreign trade has improved and the prosperity of the population has risen accordingly.

This remarkable performance is in striking contrast to earlier forecasts of a Swiss export crisis, which were made when the appreciation of the franc was far lower than it is now. Switzerland's export industry has come a long way since 1970, when parliament spent days debating the recessionary impact of introducing a five per cent export deposit. Those who at that time were subjected to vehement public criticism for pointing to the undervaluation of the franc are now admitted to have shown profound insight. The fact of the matter is that both politicians and

economists usually find prophesy a more difficult art than history.

It might be argued that these impressive results could not have been achieved without the repatriation of immigrant workers. This is undoubtedly true. But the limitation of the foreign labour force has been a major objective of Swiss policy since the 1960s; in the event, it was accomplished not by compulsion, but through the operation of market forces. Concomitantly, there has been an easing of the inflationary pressures that had been generated by the extensive investments needed to provide a steadily growing number of immigrant workers with accommodation appropriate to Swiss standards and with the necessary public facilities, above all educational, health and transport services.

In fact, the battle against inflation played an especially important part in Switzerlands' economic success. In recent years the rate of price increase in Switzerland (Table VI) and also the rate of wage growth have been substantially lower than in other countries, so that the international competitiveness of Swiss industry has turned out to be better than the exchange rate of the franc might at first suggest. If allowance is made for this international inflation differential, there remains a real export-weighted average appreciation of about 50 per cent. But that is not all. In the base year for our calculations, namely end-1970, the franc was manifestly undervalued. Even at that time the undervaluation was put by some at about 15-20 per cent. If one proceeds from this estimate and deducts it, as is necessary, from the calculated real appreciation, it might be said that in purely economic terms the franc is today probably overvalued by about 25-35 per cent. This is still a substantial figure, but much more modest than the nominal appreciation of about 100 per cent mentioned above.

The course of real appreciation was marked by an important change. From 1971 to March 1974 appreciation was higher in real terms than in nominal terms. For not only was the franc revalued, but inflation too was at that time higher in Switzerland than in most other countries. Thereafter the resultant deterioration in Switzerland's competitive position was progressively lessened by the slowdown of inflation. This can be seen in the divergence of the two curves in graph (see page 272) since the intersection in March 1974. The higher inflation rate which Switzerland showed in the early 1970s compared with its 15 major trading partners resulted in real appreciation being higher than the noaminal rise of the franc. Subsequent to the intersection of the two curves, the lower Swiss inflation rate moderated the appreciation effect and the resultant export handicap to an increasing extent. This is illustrated by the fact that the average export prices of major competitor countries, such as the United States, Italy and Great Britain, rose more strongly than those of Switzerland.

TABLE IV

Relative Shares of Swiss Exports as Regards Economic Areas and Major Countries

Exports to	1960-1964	1965-1969	1970-1973	1974-1977
	Annualized average in %			
Industrialised Countries	78.4	78.6	78.0	72.7
USA	9.4	10.1	8.5	6.7
Japan	2.2	2.5	3.3	2.8
Canada	1.5	1.5	1.3	1.1
France	8.0	8.6	8.7	8.9
Germany, West	17.2	15.0	14.7	15.2
Britain	6.1	7.1	7.5	6.2
Italy	9.0	8.5	8.7	7.6
OPEC countries: total	2.9	3.4	3.7	7.0
State Planned Economies : total	4.0	4.9	6.0	7.5
of which: Comecon	2.9	3.5	4.3	5.4
Non oil-producing developing countries	14.7	13.1	12.3	12.8

TABLE V

Export and Imports of Goods and Services as Percentage of GDP

(in %)

	Share of exports	Share of imports
1970	32.8	34.5
1971	32.7	35.2
1972	33.7	36.6
1973	35.3	37.8
1974	35.1	36.9
1975	35.5	33.7
1976	39.9	38.8
1977	42.4	41.4

These developments on the price front make the so-called Swiss miracle—full employment despite steep franc appreciation—somewhat easier to understand. Reality must, as always, be carefully distinguished from appearance. However, to regard the still unexplained element of Switzerland's success as proof of the miraculous would also be a fallacy, just like the deduction of the young logician who thought that everyone who was married to a Xanthippe must be a Socrates. In fact, Switzerland's economic achievement in recent years is attributable to some very real factors.

The fact that the appreciation of the franc did not drive Swiss manufacturers out of the world market, as had been widely expected, but on the contrary embedded them in it even more firmly, shows that appreciation represents only one dimension in the complex process of international competition. Especially in industrialised countries, other elements are at least equally important. In the context of Swiss experience, these factors can be

grouped broadly in three categories. The first is economic and social character; it concerns above all the financial environment and the relations between employers and employed; the second pertains to the special structure of the Swiss economy; the third consists in the readiness of companies to innovate and adapt.

As regards the financial environment, it is evident that the increasing liquidity of the Swiss economy and the rapid decline in interest rates subs'antially facilitated the adaptation of Switzerland's capital-intensive industry to the changed conditions (Table VII). The importance of this aspect is shown by the fact that the rate of investment in Switzerland, at between a quarter and a third of GNP, has for a long time been higher than in any other market economy in the world, with the possible exception of Japan. Moreover, industries operating with a large capital input are especially widespread in Swizerland. The prime example is the chemical and pharmaceutical industry, in which the investment needed to create a single new job now amounts to about Sfr. 1 million. The watchmaking industry also has large financing requirements. The same goes for the textile and foodstuff industries, which, because of the high level of Swiss wages, can only remain competitive on the basis of advanced technology and a capital-intensive mode of production. It is also symptomatic that mortgage debt in Swizerland, at more than Sfr. 20,000 per head of population, is well above the international average.

Equally significant, in view of the large share of capital goods in total Swiss exports, is export financing, which has been provided in abundance and on attractive terms, thanks to the capacity of the financial centre. In recent years export financing has become an increasingly important selling point: together with the product price and other factors, such as the reliability and promptness of after-sales service, it can decide the winning or losing of an order. In Switzerland it has assumed large dimensions; foreign credits approved by the Swiss National Bank during the last two years amounted to Sfr. 10.6 billion, and to this were added other authorised capital exports to the tune of Sfr. 26.8 billion, which likewise helped smooth the way for merchandise exports.

Moreover, in recent years the banks have substantially broadened their range of export financing facilities. For example, they have responded to demands from exporters for fairly long-term financing at fixed interest rates by providing so-called through-financing. The low interest charges on Swiss export credits, which are tied to the rates for medium-term notes and have therefore profited from the steep decline in interest rates in the medium-term sector of the Swiss market, are now unrivalled, as is shown by Table VIII. Even the subsidised rates in France and Great Britain are not below the Swiss level.

Another very important factor in Swiss economic success has been the constructive attitude of the trade unions. They have, as is only to be expected, occasionally adopted a somewhat radical posture even in Switzerland. But by and large they have preserved a reasonable and healthy sense of moderation and as the employers too have shown an understanding attitude, the atmosphere between the two sides of industry has remained relaxed and pay demands have been reasonable. Hence even in recent years industrial peace has been maintained almost without interruption. Whereas in the strike-prone countries of Canada and Italy industrial strife caused losses in working days per 1000 workers of 2270 and 2200 respectively in 1976, the corresponding figure for Switzerland was 20.

Moreover, the labour force has not resisted the organisational and technological innovations that were needed to improve productivity. Hundred and fortyfive years ago handweavers in Uster near Zurich set fire to the first Swiss weaving mill in order to protect their livelihood. Today their descendants have recognised that full employment and high Swiss wage levels can only be maintained if industry remains competitive. In fact, since 1970, with slightly rising output, the number of persons employed in industry has dropped by almost a quarter, which indicates a substantial rise in labour productivity. The industrial work force declined between 1970 and 1977 from 880,000 to 680,000, while industrial output last year

TABLE VII
Yield on Government Bonds
(in %)

	USA	Germany. West	Britain	Switzerland
1970	6 2	8 2	9.7	5.7
1971	5.7	7.9	8.1	5.0
1972	5.7	8.6	9.6	5.3
1973	6.1	9.6	12.5	6.3
1974	6.4	9.8	17.2	7.2
1975	6.0	8.3	14.8	5.8
1976	5.4	7.3	14.5	4.4
1977	8.0	5.7	11.9	3.8
1978 (March)	8 2	5.4	12.2	3.5

TABLE VI
Inflation Rates by Countries

	1970	1971	1972	1973	1974	1975	1976	1977
	Annual average in %							
Switzerland	3.6	6.6	6.7	8.7	9.8	6.7	1.7	1.3
USA	5.9	4.3	3.3	6.2	18.8	9.1	5.8	6.5
Germany, West	3.7	5.3	5.5	6.9	7.0	6.0	4.5	3.9
Britain	6.4	9.4	7.1	9.2	16.0	24.2	16.6	16.0
France	5.5	5.6	6.2	7.4	13.6	11.7	9.7	9.5
Italy	5.0	5.0	5.6	10.4	19.4	17.2	16.5	19.3
Japan	6-1	6.1	4.5	11.7	23.9	11.7	9.4	8.2

was about three per cent above the 1970 level.

This development together with the falling cost of capital, has helped counteract the detrimental effect of appreciation on Switzerland's international competitiveness. Added to this is the fact that Swiss firms, thanks to industrial peace and low inflation, are often in a position to conclude even fairly long term export contracts without price adjustment clauses and without escape clauses to cover delivery delays resulting from strikes. This makes them an exception in the world market and naturally wins them many export orders, for the guarantee of punctual delivery is a powerful sales argument, especially in the case of large-scale investment projects, where late deliveries can cause losses running into millions.

This brings us to the second important element in Switzerland's economic and exporting success: the characteristic composition of Swiss exports. Swiss industry, under the inescapable constraints of its location, has evolved into what is essedtially a speciality industry. Specialities are bought mainly for their reputation and quality, not so much with an eye to their price. Those who want Swiss chocolate have to pay Swiss prices for it. Those who need first-class tranquilizers cannot ignore Valium and Librium. Those who want to go skiing in winter have only a few countries to choose between and Switzerland is alone in providing ski slopes for far more people than the resident population. Only the Swiss textile industry manufactures certain fashionable, high-quality fabrics which the French couturiers need for their creations and which women are ready to pay for.

TABLE VIII

Terms for Medium-term Exports Credit (Maturity 2-5 years)

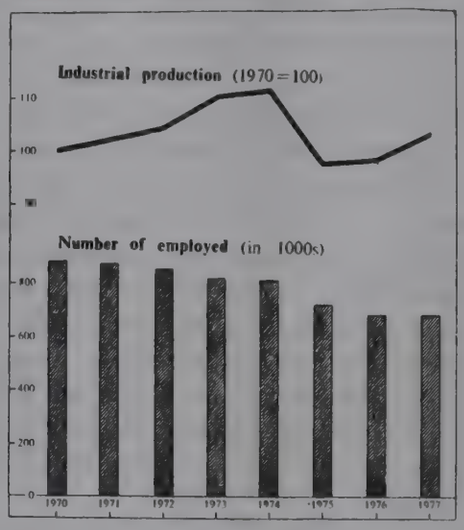
(As of end-April 1978)

Country	Interest rates p.a.	Guaranteed percentage*
Austria	7-7¼	70-100
Belgium	9.2	85-95
Denmark	7-13	80-90
France	6¾-7¼	85-95
Germany, West	6¼-7½	85-95
Britain	7¼-7¾	85-90
Italy	8.6-9.4	ca 85
Japan	7.1	80-95
Netherlands	8-8½	85-95
Sweden	11-13	80-90
Switzerland	**4¼-5½**	**80-95**
United States	8-9	90-100

*Percentage of the claim covered by the export guarantee insurance of the country in question

Thus in numerous sectors Swiss manufacturers have succeeded in creating for their products special market niches in which demand is relatively insensitive to prices. To this is added another, often disregarded aspect. As is to be expected in a small mountainous country lacking natural resources. Switzerland's exports have never been based on high inputs of energy or raw materials, much less so, for example, than in the case of W. Germany or the United States. They have therefore been comparatively little affected by the cost increase resulting from the rise in oil prices. Moreover, the raw material content in Swiss exports have long been declining. They are characterised more and more, as has recently been aptly said, by 'technical know-how, marketing effort and other value-creating activities. This alone explains the fact that in Switzerland's foreign trade over recent years the Swiss franc value per tonne of exports, at Sfr. 8700, has been eight times higher than the Swiss franc value per imported tonne, at Sfr. 1100.

Production and Employment in Swiss Industry



When the structure of Swiss exports is compared internationally, it emerges that the average value per tonne of Swiss exports is substantially higher than that of other countries, for example almost six times higher than that of the Federal Republic of Garmany. This characteristic of the export structure has undoubtedly assisted Switzerland in maintaining its position in international markets during the latest monetary crisis.

innovative spirit

These forces and influences have all helped. But they would hardly have saved Switzerland from a crisis in recent years, had they not been supplemented by the third factor mentioned above, namely the readiness of Swiss firms to innovate and adapt.

The fact that the danger of a crisis can also be turned to productive ends manifests itself in various forms. For one thing, manufacturers have concentrated their sales efforts on markets in which they are in a particularly advantageous competitive position. Thus countries with hard currencies have become relatively more important for Swiss exports. Notable successes have also been achieved during recent years in the newly-rich oil nations and also in important developing countries, where Switzerland's export financing capacity has been a considerable factor. Swiss exports to the OPEC nations rose between 1970 and 1977 by 370 per cent. Strong growth rates were also achieved, for example, in trade with Singapore, South Korea and Morocco. Switzerland's exports to these countries increased by 116 per cent, 222 per cent and 330 per cent, respectively. A consequence of these trends is that Swiss manufacturers have recently managed to gain a foothold in several regions experiencing strong economic growth, whose share in world GNP should, according to some estimates, rise from about 30 per cent at present to 43 per cent by the year 2000. There has also been a pronounced upturn in trade with planned economy countries, where demand is not sensitive to cyclical factors.

The market reorientation of the Swiss export industry has been accompanied by an almost heroic struggle by firms to adapt to the changed conditions. Rarely

has the Swiss economy experienced a period of such rapid restructuring of its industries and output as in recent years.

This can be illustrated by some examples. Until a few years ago the Swiss construction industry, which recently still accounted for about 21 per cent of Swiss GNP, confined its activities almost exclusively to the domestic market. The building slump after 1974 confronted many firms with the bitter alternative of either going under or seeking work abroad. Today Swiss construction enterprises have learnt—though some have admittedly had to pay dearly for the lesson—that in foreign parts it is possible to build successfully even on sand.

Similar successes have been scored through initiative and innovation in other sectors. For example, only a short while ago the imminent demise of the Swiss watchmaking industry was being prophesied, notably by US competitors. But now Switzerland's watchmakers are in the process of gaining a leading position in the field of electronic timekeeping. Admittedly, this is not due solely to their own initiative, but above all to the engineering achievements of Brown Boveri, which had been manufacturing electronic watch mechanisms for years, but until recently had to sell them—paradoxically—in Japan rather than Switzerland. The remark of a medieval monk still seems apt; 'Helvetia regitur confusione hominum et providentia dei"—Switzerland is ruled by the confusion of men and the providence of God.

The adaptive pressures to which Swiss firms have been exposed are also vividly demonstrated by the case of a large typewriter manufacturer. A few years ago this concern could have been bought by anyone who had been prepared to give anything for it. But it has since been restructured to such effect that it now believes it can stand up to all foreign competitors, notwithstanding the increased appreciation of the franc. The goad of losses and unemployment, it is said, released within this concern a potential of effort, inventiveness and organisational talent that enabled it not only to survive but even to improve its market position. Another example is a firm which, as a result of the appreciation of the franc, found itself being squeezed out of virtually every conventional sector of plastics manufacture. Within a few years, however, it achieved technological triumphs in the fields of dental plastics and plastic ski coatings and so gained renewed access to the world market.

All this is clearly reflected in Table IX, which shows the changes over the years in the shares of individual industries in total exports. The machinery and equipment industry, above all, has increased its share steadily since the beginning of the 1970s. Admittedly, this is partly attributable to deliveries based on old orders. In fact, the order backlog in this sector has dropped since March 1974 from 10.3 months to 7.2 months. But the increased share is due mainly to other factors. First, the industry as a whole has managed to keep its productive processes abreast of the times and also to secure adequate financing. Second, it has profited from the drive towards industrialisation in developing countries and the pressure on developing countries to rationalise their production. The chemical industry has been able to maintain its share at around 20 per cent. It has, however, been concentrating increasingly on pharmaceuticals and other specialities. A similar development, though even more marked, has been observable in the textile and foodstuff industries, whose relative contribution to exports has actually declined. Even so, many firms have achieved impressive sales results, despite appreciation. The need for major adjustments that has confronted Swiss industry is reflected in money terms in Switzerland's balance on current account. In fact, notwithstanding appreciation, the shift from merchandise trade to invisibles has so far remained very slight, as Table X shows. Exports of merchandise still account for about two-thirds of Switzerland's total current income from international transactions.

TABLE IX

Shares of Individual Branches to Total Exports

	1960-1964	1965-1969	1970-1973	1974-1977
	Annualized average in %			
Metal industries				
of which :	53.9	53.1	52.7	52.7
Machinery and apparatus	31.3	28·3	33.9	33.8
Watchmaking	14.8	13.7	11·2	9.1
Chemicals industry	19.2	20.2	21.3	21.0
Textiles and apparel	11.8	9.4	9.4	7.7
Foodstuffs and beverages	5.2	5.4	5.4	3.7
Others	9.9	11·9	11·3	14.9

cause for concern

Thus the switch from so-called secondary production to the tertiary, or services, sector has not yet materialised to any appreciable extent. This is somewhat perturbing, especially as Switzerland has an above-average proportion of its labour force employed in the secondary sector. In view of the high level of pay in Switzerland, this proportion will not in the long run be sustainable. The fact that the service sector has not made any substantial headway in the export field over recent years is therefore a cause for concern. The only components of invisible earnings to have improved or at least maintained their position are income from foreign investments, which are mediated by the banks and receipts from 'sundry services', in which the banks also play an important role.

The other service sectors have in fact lost ground. In the light of these developments, the current widespread tendency to impose procrustean restrictions upon the banks appears particularly dangerous, for the banks are clearly

the most important internationally competitive service-producing industry in Switzerland. Not only today, but above all in the future, they could make a substantial contribution to maintaining the high standard of living of the Swiss people. Thus politicians are today busily sowing at the very branch on which they and the prosperity of the population sit. Slogans are, of course, very convenient substitutes for original thought, but they are certainly not the road to success for a small nation.

These somewhat bitter remarks are not, however, intended to belittle the successful adjustments that have been achieved in current years, above all in the international field.

The old saying 'necessity is the mother of invention' fully applies to Swiss industry. With new products, new technologies and new marketing methods, Swiss manufacturers have maintained their position in the world market. However, the performance of the large corporations has not, if our observations are correct, been especially distinguished. On the contrary they have sometimes had more difficulty in holding their own than smaller more flexible units. Thus the great diversity of company sizes in Switzerland may well have been a factor in the power of resistance shown by the Swiss economy. Furthermore, besides adjustments in the manufacturing sector, certain structural changes have occurred in favour of the service-producing industries. A proportion of the workers released from manufacturing found jobs in the banking sector, which has thus contributed substantially to Switzerland's satisfactory employment situation. At present the financial centre provides work, directly or indirectly, for about 6-8 per cent of the Swiss labour force. As a creator of employment it thus occupies a position roughly equivalent to that of the automobile industry in West Germany. Moreover, through its financing capacity it has kept markets open and so helped protect jobs.

Equally erroneous is the proposition that the financial centre attracts foreign money in excessive amounts and thereby exacerbates the appreciation of the franc. In fact, the available figures point in the opposite direction. They indicate that on balance the Swiss banks export more capital than they receive from abroad. Thus in 1976, with gross capital exports at Sfr. 40 billion and gross capital imports at Sfr. 31 billion, there was a net capital outflow of Sfr. 9 billion. The surplus of exported over imported capital was probably of a similar magnitude in 1977. If the net capital outflow is substantially reduced in the current year 1978, that will undoubtedly be connected with the recently introduced investment ban, which greatly hampers the efforts of the banks to channel money abroad. Be that as it may, the activities of the banks have slowed down the appreciation of the franc and so played an important part in sustaining full employment in Switzerland.

TABLE X

Individual Positions as Percentage of Current Account

	1960-1964	1965-1969	1970-1973	1974-1976
	Annualized average in %			
Revenue				
Exports	67·6	66.4	64·4	65.7
Tourism	13.3	12.4	11·4	9.8
Earnings from investments	6.8	7·7	10·5	11·4
Private insurance	1.3	1.0	0.9	0.7
Transport	2.2	2.0	1.9	1.6
Postal service and energy	1.3	1.4	1.4	1.3
Sundry services	7.5	9·0	9·6	9.6
Expenditure				
Imports	82.1	80.7	80·3	78.6
Tourism	5.1	5·7	5.6	5.9
Earnings from investments	1·6	1.2	1.3	1.6
Private insurance	0.3	0.1	0.04	0.02
Transport	—	—	0.2	0.1
Postal service and energy	1.2	1.1	1.3	1.2
Sundry services	9.8	11.2	11.4	12.4

future problems

It would be tempting to close the analysis on that note. The Swiss economic miracle would then seem, like earlier wonders of a similar sort, to be due solely to the salutary influence of a market economy and to success in combating inflation. This is certainly an important part of the explanation. However, it would be wrong to suppose that Switzerland is basking in economic sunshine without a cloud on the horizon. In reality, Switzerland's situation is not without serious problems. For one thing, the possibility cannot be excluded that the most recent wave of appreciation has hit Swiss competitiveness harder than at present appears. Indeed, new industrial orders have fallen sharply since mid-1977. As a result, the order backlog has also declined.

Another serious cause for concern is the earning power of Swiss companies, which admittedly improved in 1977, but is still below the previously normal level and is already threatening to deteriorate again. Moreover, during the recent difficult years some firms have utilised substantial amounts of hidden reserves. The question therefore arises whether profits will, in the long run, be adequate to finance the large-scale investments in modernisation and innovation which must be made if Swiss industry is to remain internationally competitive. In so far as firms do invest, they increasingly deploy their resources abroad, notably in the United States. Currently, at any rate, domestic investment is at a level that gives cause for concern about long-term prospects. Investments in 1976-77 represented only 23 per cent of GDP, as against 32 per cent at the start of the 1970s.

The authorities are aware of these pro-

lems. They have not, as the foregoing analysis might have suggested, stood idly by while the Swiss economy was being buffeted by the icy winds of worldwide monetary crisis. On the contrary, they have intervened with great vigour. Thus, in order to promote exports, they have considerably expanded the Export Risk Guarantee especially with respect to exchange risks. Moreover, they are now proposing a stimulus programme to encourage the technological and organisational adaptation of industry. Furthermore, in an effort to curb the appreciation of the franc, draconian foreign exchange measures have been introduced, such as the interest ban, the investment ban and the commission levy on foreign funds, to name only a few of the instruments of torture that have been devised for a free economy. To the extent that these measures have been effective, they have made the exchange rate situation for the export industry better.

short-term benefits

In employment terms, they have undoubtedly produced certain short-term benefits. However, they threaten to prejudice the adjustment of the Swiss economy to the demands of the future. Switzerland, with its lack of raw materials, can only maintain and increase its prosperity in competition with economically powerful nations by excelling in quality, know-how and 'matiere grise'. Measures which inhibit the growth opportunities of branches that hold out promise for the future, particularly banking and insurance, are hardly compatible with a constructive and progressive national policy.

To this are added a number of economic and political trends on the international front, notably the tendency towards protectionism, which are detrimental to a free market economy. Switzerland is always very sensitive to dangers of this sort. The economy of such a small country can only flourish in the long run within the framework of a well-functioning world economy. It is becoming ever clearer that the disturbing signs of disintegration in the world economy stem from the lack of a strong international monetary system. The restoration of order in this sector is of central importance, not only for Switzerland, but for every nation.

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The president is report- ed to have strong views on the infighting in the ruling party, but they are obviously not for publication. Meanwhile it is possible to sympathize with the vice-president in his present predicament. His tenure is due to expire in March next. It is no secret that he does not have too many warm friends among the Janata leaders. Since he may not be keen on retiring from public life, Mr Jatti, presumably, would rather avoid making powerful enemies, but the troubles of the Janata party seem to be dragging him also into their vortex. Mr Jatti, however, is a seasoned politician and it should not be beyond his resources as chairman of the Rajya Sabha to deal justly as well as tactfully with the problems posed by the tactical struggle which is going on between the treasury benches and the opposition benches in that house. The speaker of Lok Sabha, however, may have to cope with a comparatively less strenuous task because the balance of forces in that house is different.

Thanks to the dust and din raised by these debates there is some risk of the significance of certain important observations made by the prime minister being lost. Mr Desai has reportedly suggested that time had probably come for aggrieved persons to seek legal redress when defamatory allegations are made against them. The prime minister has undoubtedly indicated a golden rule, especially for people in public life or the public eye. Even if a few of the affected persons had shown themselves to be possessed of the necessary courage or capable of taking the needed pains, the nation's affairs would have been in much better shape. Here it is not only the politicians or those associated with them who are to blame. Leaders of the business community too have fought shy of taking to court even professional calumniators. Certain organs of the press—whether upstarts or hardened criminals—have made it their business to build up circulation through so-called investigative reports or interviews with ministers or other politicians which have been exploited for the purpose of character assassination through techniques made familiar by what is known as the "yellow press". The most regrettable aspect of this affair is that even ministers of the government or other senior politicians who must be thought to have a wholesome interest in discouraging this kind of journalism are in fact patronizing it or pandering to it in various ways merely in the course of their short-sighted pursuit of personal advantages. It is to be hoped that Mr Desai's word of advice will be followed by appropriate action both by political and business leaders for calling the bluff of those who through their cheap prints are cheapening public life.

Amidst all the specula- tion over the death of the former Lt-Governor, there has been no sign or word from the Kishan Chand family that it doubts that it is a case of suicide. The dead man's wife and children must be presumed to be most concerned with ascertaining the facts about how he met his end. It is significant that none of them has contributed anything to the wild allegations that Kishan Chand, far from dying by his own hand, had been the victim of a political murder most foul. Attacks on the Delhi police for not properly investigating the case or even charges made against it that it has been in a hurry to close the file as a case of suicide on insufficient or even false grounds, have come not from Kishan Chand's wife or son or daughter, but oddly enough from such sources as a cousin of the mother of Mr Sanjay Gandhi. Family feuds are notoriously affairs of bile and venom, but Ms Nayantara Sahgal's article in the *Indian Express* of July 31, is certainly the limit. I am not referring here, of course, to those passages in that article which have become a subject of legal action, but to certain other portions in which she has stated her conclusion, without setting out her evidence, that the Delhi police is suppressing the crime because influential people are involved. It is obvious that no police force can function if its findings or its investigations are challenged as a matter of course every time someone chooses to make capital, political or other, out of a violent death. Self-appointed sleuths are allowed in detective fiction, but they could become a nuisance or worse when they start grinding their axes in real life.

The decision of the cabi- net setting up a group of six ministers to monitor the performance of the economy in key areas is not exactly an earth-shaking event for the simple reason that it could be doubted that this group could get going at all. One of its members is Mr George Fernandes and we have it on his authority that he attends to government business only during the hours of the night between 10 p.m. and 2.30 a.m. This may not suit Mr H.M. Patel who, as the rumour goes, has the Napoleonic talent for going to sleep "as is, where is". The Energy (?) minister, Mr P. Ramachandran, another member of the group, is reputed to believe in solving the problems of his ministry (and also of the Janata party in Tamil Nadu) by sleeping over them. The Railway minister, Mr Madhu Dandavate, right now, must be spending sleepless nights over how to get coal for locomotives or wagons for coal. Thus he already has enough monitoring to do and should therefore be spared the additional burden of having to coordinate his time-zone with the wayward or unpredictable time-zones of the other ministers. Finally there is Mr Biju Patnaik who, it is said, could turn night into day or day into night as it profits him. In this sense he could possibly be the group's best hope as its resident miracle-man. The last-minute addition of Mr Ravindra Varma makes no difference. He is used to being tagged to the pyjama cord of other ministers.

VB

TRADE WINDS

Debt Relief

BRITAIN HAS decided to write off £900 million of loans and interest due from 17 of the world's poorest countries including India. Britain's minister for Overseas Development, Mrs Judith Hart, made a statement in the House of Commons recently regarding British policy on debt relief in respect or the poorest developing countries. She said, "As part of its aid policy, the government is taking steps with effect from today to remove the burden of past aid loans, known as RTA (Retrospective Terms Adjustment), or to adopt equivalent measures in respect of 17 of the poorest developing countries. These are Afghanistan, Bangladesh, Botswana, Egypt, the Gambia, India, Indonesia, Kenya, Lesotho, Malawi, Nepal, Pakistan, Sierra Leone, Sri Lanka, Sudan, Tanzania and Western Samoa. All have aid repayments outstanding, but are now eligible to receive aid from us on grant terms.

"The maximum cost will be some £60m a year, and the total amount of principal and interest involved to the end of the century is some £900m. The cost will be entirely met from within the increasing aid programme. Detailed arrangements will be discussed with each of the 17 governments. In the case of India, local cost aid will be offered instead of RTA.

"RTA will not be extended to governments which would otherwise qualify but which we regard as having seriously violated human rights. At the Bonn summit, the government promised, with other participants, to support a replenishment of the International Development Association to allow its annual lending to rise in real terms, and said that the IBRD's capital should be doubled. We shall be pursuing both issues vigorously in the coming months."

Some other countries – Sweden, Canada and Switzerland - have already written off the debts of some developing countries. At the Bonn meeting of the heads of government of Britain, Canada, France, Italy, Japan and the United States and the president of Economic Commission, it was reeognised that the developing countries need increasing flows of financial assistance to be able to make real economic progress.

Units for Drugs

The minister for Petroleum, Chemicals & Fertilisers, Mr H.N. Bahuguna, informed Rajya Sabha recently that the government has recently approved the setting up of three joint venture formulation plants, one each in Maharashtra and Karnataka by Hindustan Antibiotics Limited, by involving capital outlay of Rs 2 84 crores each and one in Rajasthan by Indian Drugs and Pharmaceuticals Limited, at a capital cost of Rs 94.85 lakhs. These projects would be located near Nagpur in Maharashtra, Bangalore in Karnataka and Jaipur in Rajasthan. The minister added that the units would manufacture various formulations of drugs and were expected to be completed within a period of two years from the date of approval.

Closed Jute Mills Reopened

As a result of the direct intervention by the Industry minister, Mr George Fernandes, two jute mills of West Bengal, which had been closed for some time due to financial troubles are starting operations again. The mills are Northbrook Jute Mills and Kinnison Jute Mills. Mr Fernandes had also discussed the matter about the reopening of the mills with the chief minister of West Bengal a few weeks ago. Necessary finances for the mills have been arranged.

In regard to the Northbrook Jute Mills a consensus has been reached between the commercial banks, the management and the union. The management will provide Rs 15 lakhs and the banks will make available nearly Rs 12 lakhs and additional money for purchase of generator up to a maximum of Rs 15 lakhs. According to the consensus, the banks will reduce the outstanding by arranging to sell jute with the full consent of the union and convert a part of the deficit into term loan repayable over a few years. The board of management is being reconstituted. Mr S.K. Dutta, retired senior chief general manager of the State Bank of India, who is shortly taking over as chairman of the West Bengal State Financial Corporation will be the chairman of the company. There were some pending labour disputes, which were sorted out at a meeting taken by state government recently. The mill will be opened immediately after the formal lifting of the lock-out.

The Kinnison Jute Mills has been opened and the IFCI has made available Rs 70 lakhs for the starting-up expenses. The state government have also made available Rs 15 lakhs for certain immediate expenses. The United Commercial Bank is providing the working capital for the mill. The two mills employ nearly 8,000 persons.

Maintenance of IBM Computers

The Computer Maintenance Corporation (CMC) is fulfilling its commitment of providing continued computer support and maintenance or services to all users of IBM equipment desirous of having such service after IBM ceased operations in India from June 1 last. It is providing service at all locations and irrespective of the age and size of the system. This information was given at a meeting of consultative committee of MPs attached to the departments of Electronics, Space, Atomic Energy and Science & Technology, held recently. The prime minister, Mr Morarji Desai, presided.

Eightyfive out of the 112 IBM 1401 computers and all the 30 users of other IBM machines have signed maintenance contracts with CMC. The corporation which began its operation less than two years ago has entered about 853 contracts with users for maintenance of various types of installations. Explaining the position about existing IBM computers in use in the country the secretary of the Electronics department, Prof. M.G.K. Menon said that a very large number of these machines were old ones which

had been imported and refurbished years ago. It was difficult to find spare parts for these. Even so, the Computer Maintenance Corporation had taken on the obligation of servicing these machines and was fulfilling this responsibility. Apart from the inventory of spares taken over from IBM, imports were being made to the extent of availability and in many cases items were being made by local industry at the request of the corporation.

Distribution of Essential Commodities

Minister for Commerce, Civil Supplies & Cooperation, Mr Mohan Dharia, has urged the chief ministers of various states to ensure strict implementation of the provisions under the Essential Commodities Act, Storage Control Order, Price Display Order and similar such other measures, in order to control the prices and improve availability of essential commodities. In a letter addressed to all the chief ministers, he has pointed out that as a result of a series of measures during the past 15 months, in cooperation with the state governments, it has been possible to attain certain amount of price stability and essential items such as cereals, edible oils, vanaspati, sugar and gur, except pulses, are available at reasonable prices throughout the country.

Mr Dharia has also urged the chief ministers to take up programmes for the production of pulses and oilseeds as emphasised by the ministry of Agriculture. He has pointed out that even though massive imports of edible oils have eased the situation in the oil front and edible oils and vanaspati are easily available at reasonable prices, the country cannot afford to depend permanently on imports. It, is, therefore, necessary to take up massive programmes of production of various oilseeds all over the country.

Emphasising the need for drastic measures in the field of marketing of cement, the minister has said that while all efforts are being made for additional production and to import certain quantities of cement, a psychosis of scarcity has been created by the vested interests in the country and there are unabated reports of blackmarketing and malpractices. The Cement Manufacturers' Association (CMAS) have assured the central government that they would improve and cleanse the system of distribution of cement and it has been decided to watch the policy upto the end of September. Mr Dharia, however, urged the states not to remain complacent and to keep their scheme for distribution of cement through public agencies and cooperatives ready so that they can take over the distribution of cement at any moment. Simultaneously, the state governments should arrange for frequent checks on the sales and stocks already held by cement stockists and dealers and should take drastic action against the dealers indulging in malpractices.

Labs for Road Tests

The government has decided to extend grant-in-aid to the extent of 50 per cent of the cost for setting up mobile laboratories for the testing and quality control of roads in various states. The central share will come to Rs 1.15 lakhs for each laboratory. A model scheme for organising state testing and control laboratories for roads was circulated in 1957 by the ministry of Shipping and Transports and as a result, most of the states have set up such laboratories. The mobile laboratories are being introduced for the first time. The matching grant-in aid to such states as have not established any laboratory so far will be raised to Rs 2.5 lakhs.

Commodity Loan from Japan

The governments of Japan and India exchanged notes recently concerning the commodity loan for an amonut of 6 billion Yen (equivalent to Rs 24.59 crores at the current exchange rate) to India for the year 1978-79. The notes were exchanged between Mr Masao Kanazawa, ambassador of Japan to India and Dr Manmohan Singh, secretary, department of Economic Affairs, ministry of Finance, government of India, on behalf of their respective governments The signing ceremony took place in the ministry of Finance, New Delhi. This commodity loan is a part of the 18th yen credit, the other part of which will go to the project loan.

The salient features of the exchanged notes are as follows: (i) The commodity loan will be extended by the Overseas Economic Cooperation Fund of Japan which is a government affiliate for extending official development assistance to developing countries; (ii) The interest rate of the commodity loan this year will be reduced to three per cent from 3.5 per cent last year, and the loan will be repayable over a period of 30 years including ten years grace period; (iii) The loan will be generally untied and will be used to cover payments in respect of import of goods and services not only from Japan but also from other member countries of the Organization for Economic Cooperation and Development (OECD) and developing countries; and (iv) Machinery and equipment for the phase III of Bombay High Off-shore Development Project will be imported under this commodity loan as was the case for the year 1977-78 in addition to the other items in the list for the year 1977-78. This commodity loan is extended to India in response to the request made by the government of India at the Aid India Consortium meeting held in Paris in June, 1978 and with a view to contributing to the economic development of India.

Solar Power Packages

Bharat Heavy Electricals have undertaken to develop small decentralised solar power packages to make available power to remote rural areas where there is no likelihood of power being made available through conventional transmission net works in the next ten to fifteen years. These energy packages are being designed to harness not only solar energy but also other non-conventional energy sources such as wind and biogas (gobar gas). The exhaust steam from the solar energy unit will be used for running a cold storage plant to preserve food, fruits and vegetables. The biogas plant operating on a mixture of cow-dung and human excreta will meet the needs of cooking.

The development work on these energy packages is based on data collected from the 10 KW solar power plant at Madras set-up jointly by BHEL, MBB of West Germany

and IIT, Madras, earlier this year with funds from department of Science and Technology, government of India. A 20 KW vapour turbine, to form part of such solar packages, is also being developed by BHEL. This turbine will have application not only for power generation but also for pumping water for irrigation purposes using solar energy. The development of non-conventional energy sources was taken up by BHEL about three years ago. Commercial models of domestic solar water heaters for household application as well as larger solar water heating systems for hotels, dairies, hospitals and process industry applications have been developed.

Guidelines on Oral Instructions

The central government has suggested new guidelines on the role of oral instruction in the transaction of business of the government in terms of Sub-rule 2 (ii) of the Central Civil Services (Conduct) Rules, 1964.

The guidelines impress upon all government servants that: Oral instructions should not, as far as possible, be issued by senior officers to their subordinates; If the oral instructions are issued by any senior officer they should be confirmed by him in writing immediately thereafter; If a junior officer seeks confirmation to the oral instructions given by the senior, the latter should confirm it in writing whenever such confirmation is sought; A junior officer who has received oral orders from his superior officer should seek confirmation in writing as early as practicable. Whenever a member of the personal staff of a minister communicates an oral order on behalf of the minister it should be confirmed by him in writing immediately thereafter; If a junior officer receives oral instructions from the minister or from his personal staff and the orders are in accordance with the norms, rules, regulations or procedures, they should be brought to the notice of the secretary or the head of the department, as the case may be, for information; If a junior officer receives oral instructions from the minister or from his personal staff and the orders are not in accordance with the norms, rules, regulations or

Your Income Tax!
HOW TO CALCULATE?

The Rate Schedule below may help you, if your status is

INDIVIDUAL OR HUF*

RATES OF INCOME TAX FOR 1978-79 ASSESSMENT AND OF ADVANCE TAX PAYABLE DURING THE FINANCIAL YEAR 1978-79.

Total income slab		Tax payable for every individual, HUF (except those as per col. 3)			Tax payable for every HUF having at least one member whose total income exceeds Rs. 10,000		
1.		2.			3.		
From	To	Fixed amount for the slab	Plus	Variable amount as under	Fixed amount for the slab	Plus	Variable amount as under
Upto 10,000		NIL			NIL		
10,001	15,000	NIL	Plus	15% exceeding Rs. 8,000*	NIL	Plus	18% exceeding Rs. 8,000**
15,001	20,000	1,050	Plus	18% exceeding Rs. 15,000	1,260	Plus	25% exceeding Rs. 15,000
20,001	25,000	1,950	Plus	25% exceeding Rs. 20,000	2,510	Plus	30% exceeding Rs. 20,000
25,001	30,000	3,200	Plus	30% exceeding Rs. 25,000	4,010	Plus	40% exceeding Rs. 25,000
30,001	50,000	4,700	Plus	40% exceeding Rs. 30,000	6,010	Plus	50% exceeding Rs. 30,000
50,001	70,000	12,700	Plus	50% exceeding Rs. 50,000	16,010	Plus	55% exceeding Rs. 50,000
70,000	1,00,000	22,700	Plus	55% exceeding Rs. 70,000	27,010	Plus	60% exceeding Rs. 70,000
1,00,001 and more		39,200	Plus	60% exceeding Rs. 1,00,000			

SURCHARGE : IN ADDITION to the Income-tax payable at the above rates, a surcharge equal to 15% of the income-tax is also payable.

* provided that in case where total Income does not exceed Rs. 10,540, the Income-tax payable shall not exceed 70% of the total Income exceeding Rs. 10,000

** provided that in case where total income does not exceed Rs. 10,690, the income-tax payable will not exceed 70% of the total income exceeding Rs. 10,000

* Hindu Undivided Family

calculate taxes correctly—pay promptly

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New Delhi-110001.

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procedures, they should seek further clear orders from the secretary or the head of the department as the case may be, about the line of action to be taken stating clearly that the oral instructions are not in accordance with the rules, regulations, norms or procedures.

New Trains

Mr Sheo Narain, minister of state for Railways informed Lok Sabha recently that during 1978-79, so far 36 new trains have been introduced and the runs of 29 existing trains extended to meet the requirements of traffic on different sections. During the year 1977-78, 108 new non-suburban trains were introduced and the runs of 74 trains extended. He added that based on the occupation of existing trains and the assessment of traffic potential on various sections on the railways, new trains were introduced, runs of existing trains extended having regard to the availability of requisite resources by way of line capacity, terminal facilities and rolling stock. He also informed that the number of passengers travelling on trains increased by 42.86 per cent in 1977-78 over the figures of 1974-75. In all, 3,470.7 million passengers travelled in 1977-78 on trains run by the Indian Railways.

Salt Enquiry Committee

At a meeting with members of parliament from Gujarat recently, the Industry minister, Mr George Fernandes, announced the formation of a high-powered Salt Enquiry Committee under the chairmanship of Mrs Abha Maiti, minister of state for Industry The committee will look into the entire aspect of salt industry including production, cost and prices, distribution and utilisation of salt cess. The announcement came when some members invited the minister's attention to certain problems being faced by the salt industry, specially the small producers.

This meeting was the third in the series of meetings with the members of parliament from different states convened by the minister of Industry to discuss important developments in the industrial field. The minister told the members that the purpose of the meetings was to secure cooperation of the peoples' representatives for the government's programme of industrialisation of rural areas including the setting up of district industries centres.

Problems of Metre Gauge Operations

A committee has been recently set up by the ministry of Railways in order to study the problems of metre gauge operations. The committee will make a camprehensive study of the problems and make suitable recommendations on measures to be adopted for improving equipment and operations on metre gauge.

The committee comprises the director, Railway Planning, the director, Efficiency Bureau, the director, Traffic Transportation and the director, Safety and Coaching of the Railway Board; the director, Standards (Civil), director, Standards (Motive Power), the director, Standards (Wagon) and the director, Traffic (Research) of the Research, Design and Standards Organisation of the Railways at Lucknow.

Mr Sheo Narain, minister of state for Railways, told Lok Sabha recently that the following projects of conversion from metre gauge to broad gauge were in various stages of construction at present: Barabanki-Samastipur; Moradabad-Ramnagar and Barauni-Kathihar on the North Eastern Railway. New Bongaigaon-Gauhati on the Northeast Frontier Railway; Dharmavaram-Bangalore and Manmad-Aurangabad on the South Central; Parbhani-Purli Vaijnath on the South Central Railway and Viramgam-Okha-Porbandar on the Western Railway.

The following schemes have also been approved and included in the budget but construction work on them has not been taken up due to shortage of funds: Kashipur-Lalkuan and Varanasi-Bhatni on the North Eastern Railway; Gantur-Macherla on the South Central Railway; Samastipur-Darbhanga on the North Eastern Railways and Delhi-Ahmedabad and Nadiad-Kapadganj on the Western Railway. Broad Gauge line from Ernakulam to Trivandrum and Suratgarh to Bhatinda has been commissioned for traffic after gauge conversion of the metre gauge line.

Gold Prices

Gold prices in Bombay crossed the Rs 700-mark for 10 grams on Saturday, August 5. By Tuesday August 8, the price had jumped to Rs 720 per 10 grams. Despite the release of more than nine tonnes of gold through seven public auctions, the standard mint gold prices have continued an upward march, the abnormal rise in gold prices was attributed to the sustained demand from upcountry markets and considerable shortfall in arrivals. The gold prices which touched an all-time high at $200 per ounce in the international market also provided a new fillip to the sentiment. With the revival of the festival season further hike in gold prices is not ruled out.

Names in the News

Mr P.K. Verghese, an officer of the Telegraph Engineering Service, has taken over as member, Telecom Operations, P & T board and ex-officio additional secretary to government of India.

Mr R. Ranadive, director Information and Regulation, in the Civil Aviation department, has gone to Fiji on a UN assignment to assist the government of Fiji in preparing air law legislation for that country. An expert in air law, Mr Ranadive has been a member of the Indian delegations to various countries for negotiating bilateral air services agreements. He is a member of International Air Transport Association (IATA) Legal Committee.

Mr Sushil Chandra Varma, at present secretary in the department of Coal, has been appointed secretary in the department of Power in place of Mr R.V. Subrahmanian who retired on July 31. Mr Varma will be secretary, department of Power, in addition to his present charge, until he is relieved by Mr N.B. Prasad who will take over as Power secretary.

COMPANY AFFAIRS

Haryana Sheet Glass Limited

HARYANA SHEET Glass Ltd proposes to go in for public issue of Rs 36 lakhs divided into 360,000 equity shares of Rs 10 each for cash at par. The issue is underwritten to the extent of Rs 27 lakhs by all-India financial institutions, banks and stock brokers. As for the balance shares of Rs 9 lakhs, the promoters have given an undertaking to take up the same in the event the public issue is not fully subscribed.

The subscription list opens on August 16, 1978 and will close on August 28. The subscription list can be closed earlier at the discretion of board of directors but not earlier than August 18, 1978.

The cost of the project estimated at Rs 165 lakhs is being met by term loans of Rs 105 lakhs, IDBI—Rs 45 lakhs, IFCI—Rs 30 lakhs, ICICI—Rs 30 lakhs and share capital of Rs 60 lakhs out of which the promoters have already contributed to the extent of Rs 24 lakhs. In addition to promoters' contribution, the company has also obtained, to meet immediate requirements for execution of the project, bridging loans aggregating Rs 57 lakhs from IDBI, IFCI and ICICI.

The company has taken possession of the land and civil construction thereon is in progress. Part of the electrocast refractories and special clay imported from Hungary, France and Germany have already reached at the site. The erection of regenerators and furance is in full swing. Out of the total requirements of plant and machinery estimated at Rs 78.42 lakhs, imported component works out to about Rs 28 lakhs. The Fourcault glass drawing machines equipped with automatic glass cutting devices are being imported from Techmashexport, Moscow. All arrangements have been made for utilities. The company expects to go on stream in October, 1978.

Bombay Dyeing

The Bombay Dyeing and Manufacturing Co has submitted a composite industrial licence application for the manufacture of 60,000 tonnes of dimethyl triphthalate (DMT) which is the principal raw material for the manufacture of polyester staple fibre and filament. The screening committee appointed by the government has already reviewed the company's proposal and it will now require the sanction of the project approval board. The total fixed cost of the plant is estimated at around Rs 34 crores.

Since it is difficult to get permission for building new plant facilities in Bombay, the company has decided to transfer a part of its processing plant to Roha in Kulana district which is a backward area as defined under the Income Tax Act. Construction of the new plant has commenced. The plant is expected to go on stream by July 1979,

The company has been approached by Commonwealth Textiles (Jakarta) Ltd to join with it in setting up a composite textile mill at Bandung in Indonesia. There will be a technical collaboration agreement between the two companies.

The company has earned a gross profit of Rs 7.96 crores on the turnover of Rs 101.23 crores during the 15 months period ended March, 1978 against Rs 5.28 crores on the turnover of Rs 76.20 crores in the previous year. After providing Rs 2.34 crores (Rs 2.06 crores) for depreciation, Rs 1.80 crores (Rs 50 lakhs) for investment allowance and Rs 5 lakhs (Rs 93.35 lakhs) for taxation, and after some adjustments, the disposable surplus is Rs 4.75 crores (Rs 1.79 crores). A total equity dividend of 20 per cent (Rs 1.25 per share interim and Rs 3.75 per share final) will absorb Rs 99.15 lakhs. General reserve gets Rs 3.70 crores (Rs 79 lakhs).

English Electric

The directors of the English Electric Company of India Limited have recommended a dividend of Rs 3.20 per share, subject to deduction of tax, for the year ended March 31, 1978. The company recorded sales and income of Rs 17.22 crores for the year, approximately the same last year. Profit before tax was Rs 3.70 crores out of which a sum of Rs 2.52 crores has been provided for taxation against Rs 2.38 crores last year. Provisions for investment allowance reserve is Rs 2.15 lakhs against Rs 1.90 lakhs during the previous year. An amount of Rs 43.46 lakhs (Rs 52.86) lakhs has been transferred to general reserve.

M.M. Rubber

M.M. Rubber Co. a leading manufacturer of foam rubber products will issue on August 16, 380,000 equity shares of Rs 10 each at par. The proceeds of the issue will be utilised for financing partly the Rs 2.28 crore new project being set up at Ranipet, about 100 kilometres from Madras, for the manufacture of biaxially oriented polypropylene film (Bopp film).

The company will be the first to manufacture this product in the country. Bopp film is the latest type of flexible packaging film and it has gained popularity the world over. The company is licenced to manufacture 800 tonnes per annum of Bopp film. The main plant and machinery will be imported from the USA. The main raw material, polypropylene, will be obtained from Indian Petro Chemicals Ltd, Baroda.

According to Mr M. Philip, managing director, the demand for this product is much more than the company's licensed capacity. This film will be about 20 per cent cheaper than the other current products of packaging like cellophane. Due to its non-toxicity, flavour retention and low moisture absorption properties, it will be suitable for packaging of confectionery, pharmaceuticals, dairy products, frozen foods, fresh fruits and meat. The company does not anticipate any difficulty in marketing its entire production. The plant is expected to start commercial production by October 1979. This new line is expected to add Rs 3 crores to the company's turnover annually. Full

capacity is expected to be achieved in about two years after starting production.

British Airways

British Airways made an after-tax profit of £18 million as a result of its 1977-78 trading. After taking into account tax of £15 million provided in previous years, profit attributable totalled £33 million. Turnover reached £1,355 million, an increase of £107 million over the previous 12 months.

"British Airways is concerned that the situation may well be exacerbated by the delay in determining the case of additional terminal resources", said Sir Frank McFadzean, the chairman of the company at its annual general meeting. Other highlights from the annual report published on July 27 are: The airline's current plan is to self-finance 60 per cent of the capital expenditure required over the next five years. In the year, the airline carried 13.4 million passengers—an eight per cent decrease on the previous 12 months. Passenger load factor stood at 59.9 per cent. Cargo revenue was up from £138 million in 1976-77 to £148 million in the year under review. British Airtours, the charter subsidiary, saw turnover rise from £28 million to £33 million.

Bank Bumiputra Malaysia Berhad

Mr Kamarul Ariffin, chairman Bank Bumiputra Malaysia Berhad has revealed that the bank completed another successful year in 1977 with an increase of 25.0 per cent in pre-tax profit from $1.6 million to $2.0 million, representing a satisfactory rate of return of 44.4 per cent on paid-up capital of $4.5 million. Total deposits rose by $29.2 million or 26.2 per cent to $140.6 million while loans and advances increased by $6.3 million or 14.4 per cent to $50.2 million. The company established a branch in Kota Bharu in 1976 and another one in Johor Bahru during the year under review. While plans are afoot to establish further branches in Kuantan and Kota Kinabalu during the course of this year. On July 27, 1977 Bank Pembangunan ceased to be a subsidiary of the bank as a result of a partial conversion of the federal government's loan to the company into equity following bank's request. With this conversion the paid-up capital of the company now stands at $20 million and the bank's shareholding of $1.5 million constitutes a minority interest.

Mr Ariffin felt that with the anticipated slowdown of economic expansion in the industrial countries, Malaysia was expected to experience a slower pace of growth. Thus on current evidence the Malaysian economy was projected to grow by a lower rate of seven per cent in real terms in 1978. Although this might be the case, he was confident that the bank will be able to maintain its performance during the course of this year.

Zenith Steel

The board of Zenith Steel Pipes has proposed to issue bonus shares in the ratio of one share for every four shares held by capitalising Rs 63 lakhs out of the company's reserves. The directors have also proposed to maintain the equity dividend at 15 per cent for the year ended April 30, 1978. A part of the dividend is expected to be exempted in the hands of the shareholders. The Rs 10 fully paid-up equity shares of the company, which were firm last week, ruled steady around Rs 31.50.

The company's operations have resulted in a slightly lower gross profit of Rs 1.78 crores against Rs 1.84 crores for the previous year. This is despite an increase in sales to Rs 30.19 crores from Rs 28.88 crores. The drop in the profitability—the ratio of gross profit to sales declining to 5.9 per cent from 6.4 per cent—seems to be largely on account of the drop in exports following adverse conditions in international market. Its value of exports (fob) of pipes totalled Rs 7 crores against Rs 10.40 crores in 1976-77 on account of the poor price realisation in export market.

However, prices of steel pipes have tended to firm up in export market and the company hopes to show a recovery this year. Again, the management's efforts to enter

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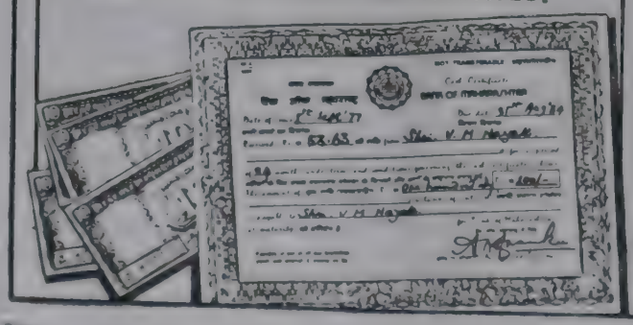

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the markets of the USA, Europe and Australia have borne good results and exports to these markets are on the increase. In 1976-77, the company was the largest exporter of tubes to the USA from India.

The company's production of pipes was maintained during 1977-78. The availability of zinc, a major raw material, was satisfactory, but that of steel erratic in the second half of the year under review. Supply of steel have turned good in the past few weeks, but the price of coils have been stepped up by about Rs 450 per tonne in early June. The growing shortage of steel and the price hike is likely to affect the company's working during the current year.

The company's special steels division (mini-steel) reported a higher production of 22,000 tonnes of billets during 1977-78 against 19,000 tonnes in the previous year. It would have been still higher but for shortage of power. The company is trying to develop new grades of steel. Its rolls and shears division also fared well during 1977-78. The company is setting up a rolling mill with an annual capacity of 16,500 tonnes a year (single shift basis). The construction is fast progressing and the management hopes that the rolling mill will be commissioned in the first quarter of 1979.

Permanent Magnets

The chairman of Permanent Megnets, Mr M.R. Ruia, has revealed that sales of the company in the first half of the current year (January to June) aggregated Rs 128.33 lakhs against Rs 92.80 lakhs in the same period of last year, representing a rise of over 28 per cent. Of this, the share of cast magnets is placed at Rs 98.22 lakhs against Rs 22.93 lakhs. As the demand for cast magnets in the country was falling owing to the switch over to fertile magnets, the company is looking export markets for increased business. Exports of cast magnet in the six months of this year amounted to Rs 17.68 lakhs against Rs 9.16 lakhs a year before.

Colour-Chem

To ensure adequate working capital for the company's planned growth and development and to reduce its dependence on fixed deposits from the public, loans from shareholders and other short-term borrowings, the directors of Colour-Chem propose to issue 10.5 per cent non-convertible first mortgage debentures of Rs 1,000 each for a total sum of Rs 3.50 crores. They propose to offer these debentures to the equity shareholders (other than non-resident shareholders) for cash at par on rights basis in the ratio of one debenture for every 11 equity shares.

The company did well during the year ended March 1978 with higher sales and profits. Equity dividend has been maintained at 12 per cent. This was achieved despite the continuing recession in the textile industry and severe constrain on the liquid resources which tended to restrict the offtake of the company's products.

Under the expansion programme, the acrylic monomers plant at Thane was commissioned in the second half of 1977-78 and has started the manufacture of methyl acrylate and butyl acrylate on a commercial scale. The construction of the effluent disposal plant has made satisfactory progress. The new factory at Roha, a backward area in Maharastra, is scheduled to go on stream by April or May 1979.

Davy Ashmore

The board of directors of Davy Ashmore India Limited has recommended a dividend of 15 per cent on equity shares and 11 per cent on preference shares, subject to tax, for the years ended March 31, 1978 in proportion to the amount paid on the shares and pro rata to the period for which such capital is paid up. The turnover of the company (after adjustment of work-in-progress) comes to Rs 413.23 lakhs as against Rs 260.36 lakhs in the previous year, thus registering an increase of about 58 per cent. Profit before depreciation and tax is Rs 47.21 lakhs (Rs 20.86 lakhs). After providing for depreciation Rs 5.28 lakhs (Rs 3.34 lakhs), taxation nil (Rs 14.90 lakhs), preliminary expenses written off Rs 0.75 lakhs (nil) transfer to Investment allowance reserve Rs 24.54 lakhs (nil), the profit available for distribution is Rs 16.64 lakhs (Rs 3.10 lakhs). The proposed maiden dividend will absorb about Rs 11.33 lakhs (nil) and is covered 3.7 times. After providing for dividend, the balance of Rs 5.31 lakhs (Rs 3.10 lakhs) has been transferred to general reserve,

Metal Box

The Metal Box Co of India Ltd has turned out substantially improved results for the year ended March, 1978, with profit going up at Rs 2.87 crores. The company had achieved a major recovery last

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year by earning a profit of Rs 51 lakhs after a loss in the previous year. The profit for 1977-78 has enabled the company to wipe out its accumulated loss leaving an adequate surplus to recommend a divident of eight per cent. With that the company returns to the dividend-paying list after a lapse of two years. The company has embarked on its major diversification project the manufacture of bearings, and will shortly be raising further capital by way of a bond issue to meet a part of the project cost and to achieve dilution of foreign equity.

Vallabh Glass

Shree Vallabh Glass Works has turned out good results for the years ended March 31, 1978. The directors have raised the equity dividend from Rs 15 per share for 1976-77 to Rs 30 per share, inclusive of Rs 12 to mark the company's entry into its twentieth year. A part of the dividend is likely to be exempt from tax.

What is more, the directors are considering the possibility of a bonus issue as the reserves now amount to Rs 2.40 crores against the paid-up equity of Rs 1.25 crores, The working in the current year has continued to show a healthy trend, the turnover for the first four months, having aggregated about Rs 4.50 crores against Rs 4.44 crores in the corresponding period of 1977-78, a rise of 31 per cent.

The turnover for 1977-78 shows an increase of about 37.7 per cent from Rs 8.30 crores to Rs 11.43 crores. The gross profit has increased by about 81.8 per cent from Rs 81.10 lakhs to Rs 1.47 crores. Having completed the expansion programme in respect of figured and wired glass, the company is working at present on its new plant for the manufacture of sheet glass.

ITC

During the year ended March 31, 1978, ITC's total income has come to Rs 382 crores and the gross profit is Rs 11.97 crores. After providing Rs 3.63 crores for depreciation and Rs 4.33 crores for taxation, the profit after taxation comes to Rs 4.12 crores compared to Rs 3.94 crores previously. A sum of Rs 101.50 lakhs has been transferred to investment allowance reserve. The proposed unchanged dividend of 15 per cent will absorb Rs 2.84 crores. The bonus shares, allotted in the proportion of 1:5 in June last, will be entitled to proportionate dividend declared for the current year.

Having established its own three hotels in Delhi, Agra and Madras, ITC has now decided to provide technical and operations consultancy under service contracts to other hotel promoters in the country. By the end of March 1979, six hotels under this scheme are expected to become operational, including one in Kathmandu.

The company is also expanding its food division. It has now purchased the two Japanese trawlers, which had been taken on charter and has also chartered two more Mexican vessels, making a fleet of six large trawlers. During the year ended March 31, 1978, there was a substantial drop in prices of exportable shrimps and the company exported marine foods worth Rs 3.86 crores. Prices have now recovered from the low levels that prevailed at the end of 1977.

Bhadrachalam Paperboards, in whose share capital the company has invested Rs 3.40 crores, expects to start production on schedule by the end of 1979. It has completed all financial arrangements. Commenting on the future prospects the directors say that a firm foundation has been laid for further growth in the existing areas of the company's business activity.

Capital and Bonus Issues

Consent has been granted to six companies to raise capital of Rs 5.76 crores. The following are the details:

Gupta Trading Corporation (India) Ltd, has been allowed to issue bonus shares for Rs 1.50 lakhs in the ratio of one bonus share of Rs 100 for each equity share of Rs 100.

Myul Chemicals Pvt Limited, has been allowed to issue bonus shares worth Rs 100,000 in the ratio of one bonus share of Rs 100 each for each equity share of Rs 100.

May Chemicals Pvt Limited, has received consent to issue bonus shares worth Rs 100,000 in the ratio of one bonus share of Rs 100 each for each equity share of Rs 100.

Colgate Palmolive India (Pvt) Ltd, has been allowed to issue bonus shares for Rs 195 lakhs in the ratio of 1.30 bonus shares of Rs 10 each for each equity share of Rs 10.

The company has also received consent for offer for sale to the Indian public by a prospectus of 11,79,000 equity shares of the face value of Rs 117.90 lakhs out of non-resident shareholders at a premium of Rs 15 per share of Rs 10.

Remington Rand of India Limited, has been allowed disinvestment of 6,05,850 equity shares of Rs 10 each at a premium of Rs 7.50 per share in favour of Indian residents with a view to dilution under FERA, 1973. Out of the above offer, Rs 30 lakhs worth of shares shall be offered to the public by a prospectus.

International Computers Indian Manufacture Limited, has been allowed to issue fully paid equity shares of Rs 10 each worth Rs 7 lakhs to International Computer Ltd, UK, in part satisfaction of the consideration for takeover of the assets of International Computers India Pvt Limited and Rs 130 lakhs in equity shares of Rs 10 each, out of which equity worth Rs 25 lakhs is to be issued to existing Indian resident shareholders of the company on right basis, Rs five lakh worth of equity to the employees of the company and equity shares worth Rs 100 lakhs to the public.

Dividend

Name of company	Year ended	Equity dividend	
		Current year	Previous year
Seshasayee Paper	March 1978	12	12
Universal Electric	March 1978	12	10
Super Spinning	March 1978	12*	18
Polychem	March 1978	12**	12
Manjushree Plantations	March 1978	18@	18
Anand Electric Supply	March 1978	15	20
Dadiad Electric Supply	March 1978	10	20
Midland Rubber	March 1978	20	20

* On raised capital by one for one bonus issue.
**On raised capital by one-for-four bonus issue.
@On raised capital by one-for-two bonus issue.

India's external debt

External debt outstanding against this country as on March 31, 1978 comes to Rs 8227 crores. India is a donor also under the Colombo Plan, the Special Common Wealth African Assistance and Indian Technical and Economic Cooperation Programme.

IN REPLY to a question in Rajya Sabha on the debt position of the country, the minister of Finance laid a statement on the table of the house which indicates that India's external debt outstanding on March 31, 1978 was Rs 8,226.76 crores and the estimated interest payment during 1978-79 would be Rs 174.98 crores plus Rs 22.58 crores payable from an interest bearing deposit account to which receipts of loans from Iran by the Indian Oil Corporation, Madras Refineries Ltd, Kudremukh Iron Ore Co Ltd and the State Bank of India have been credited. The external debt outstanding on March 31, 1978 in respect of IDA, IBRD and OPEC fund amounted to Rs 3,045.54 crores. The estimated interest payments / service charges during 1978-79 to the above institution is placed at Rs 50.93 crores. The countrywise details of the debts received by the government of India as on March 31, 1978 are given in Table I. Countrywise details of the debts received during 1975-76 and 1977-78 are given in Table II.

In reply to another question a statement laid on the table of Rajya Sabha indicates that during 1976-77 and 1977-78 technical assistance provided under the Colombo Plan was 1976-77 Rs 4.5 million, 1977-78 Rs 8.0 million; under the Special Commonwealth African Assistance Plan (SCAAP) was 1976-77 Rs 1.4 million and 1977-78 Rs 2.4 million and under Indian Technical and Economic Cooperation Programme, 1976-77 Rs 28.8 million, 1977-78 Rs 66.5 million. The countries which were given assistance under various schemes are given below:

Under the Colombo Plan

1. Afghanistan
2. Australia
3. Bangladesh
4. Bhutan
5. Burma
6. Fiji
7. Indonesia
8. Iran
9. Japan
10. Khmer
11. South Korea
12. Laos
13. Malaysia
14. Maldives
15. Nepal
16. New Zealand
17. Pakistan
18. Philippines
19. Singapur
20. Sri Lanka
21. Thailand
22. Vietnam

Under the SCAAP

1. Botswana
2. Ghana
3. Kenya
4. Lesotho
5. Malawi
6. Mauritius
7. Nigeria
8. Sierra Leone
9. Swaziland
10. Tanzania

TABLE I

External debt countrywise outstanding as on 31.3.1978 and the estimated amount of interest payments during 1978-79

(Rs crores at current rates of exchange)

Country	External debt outstanding as on 31.3.1978	Estimated interest payment during 1978-79
1. Austria	29.54	0.89
2. Belgium	51.12	0.66
3. Canada	373.33	2.53
4. Denmark	22·36	0.05
5. France	305.22	14.79
6. FRG	1210.98	32.46
7. Italy	27.63	1.08
8. Japan	945.79	35.13
9. Netherlands	283.71	7.99
10. Sweden	95.52	0.69
11. Switzerland	49.55	1.91
12. UK	819·98	9.70
13. USA	2694·93	52·64
14. United Arab Emirates	57·33	1·45
15. Kuwait Fund for Arab Economic Development	33.26	1.72
16. Qatar	0.81	0.05
17. Iraq	146·48	3.70
18. Iran	737.01	22.58
19. Abu Dhabi Fund for Arab Economic Development	5.83	0.30
20. Saudi Fund for Development	—	0.86
21. Czechoslovakia	37.27	1.00
22. Hungary	11.21	0·21
23. Poland	10.21	0.25
24. USSR	275.74	4.82
25. Yugoslavia	1.95	Neg
Total	8,226.76	174.98 + 22.58

11. Uganda
12. Zambia

Under the ITEC

1. Afghanistan
2. Angola
3. Algeria
4. Barabados
5. Botswana
6. Brazil
7. Burma
8. Cyprus
9. Ethiopia
10. Arab Republic of Egypt
11. Fiji
12. Ghana
13. Guinea
14. Guyana
15. Indonesia
16. Laos
17. Malaysia
18. Mauritius
19. Mauritania
20. Malta
21. Maldives
22. Mozambique
23. PDRY
24. Scychelles
25. Sri Lanka
26. Somalia
27. Sudan
28. Syria
29. Tanzania & Zanzibar
20. Tonga
31. SRVN (Vietnam)
32. Upper Volta
33. Yemen Arab Republic
34. Zimbabwe
35. Zaire

TABLE II

Country-wise Details of Debts Received by the Government of India during 1975-76, 1976-77 and 1977-78

(Rs crores at current rates of exchange)

Country	Amount of debt received during 1975-76	1976-77	1977-78
1. Austria	2.71	2.82	1·75
2. Belgium	6.24	8.56	6.79
3. Canada	28.40	16·48	27.01
4. Denmark	2·07	1·48	3.67
5. France	62.61	50.65	41·28
6. FRG	117.53	123.43	71.33
7. Italy	—	3.52	15.67
8. Japan	89.37	129.80	67.99
9. Netherlands	23.01	45.03	51·19
10. Sweden	26.86	5·90	2·18
11. UK	63·37	15.41	13·43
12. USA	107·58	71.13	25.11
13. Switzerland	7·58	8.58	4.76
14. Iran	326.56	174.49	166.70
15. Iraq	31·26	33.12	3.89
16. UAE	44·10	17.96	—
17. Kuwait Fund	—	20.00	13.25
18. Abu Dhabi Fund	—	—	5.83
19. Czechoslovakia	4.96	8.54	4.59
20. Poland	0.49	0.03	0.01
21. USSR	26·64	25.85	24.19
22. Hungary	2.42	2·60	4.72
Total	973·76	765.38	555.39
Institutions			
1. IDA	430.20	480·73	290.46
2. IBRD	4.54	20.88	72·17
3. OPEC	—	—	18.43
Total	434·74	501.61	381·06

Technical assistance was also provided to Bangladesh on bilateral basis the cost of which is estimated at Rs 1.9 million and Rs 1.4 million during 1976-77 and 1977-78 respectively.

Budget provision is made for provision of technical assistance under the Colombo Plan, SCAAP and ITEC for all countries together; country-wise figures are not maintained.

The government of India extended credits to the following countries in the amounts mentioned against each for enabling them to purchase Indian equipment and commodities for their development purposes:

(Rupees in million)

	1976-77	1977-78
1. Sri Lanka	71	100
2. Vietnam	—	100
3. Mauritius	—	100
4. Bhutan	15.6	28.6
5. Bangladesh	69.3	20.7

Grants were also provided to neighbouring countries for their development programmes. The amounts were:

(Rupees in million)

	1776-77	1977-78
1. Nepal	99.5	82.1
2. Bangladesh	7.9	1.7
3. Bhutan	212.1	246.6

During 1977-78 India agreed to give for the first time interest-free commodity loans of 50,000 tonnes of wheat to Afghanistan and 1 lakh tonnes of wheat to Vietnam (converted into 70,000 tonnes of maida).

ODA falls as proportion of DAC's GNP

THE TOTAL net flow of resources to developing countries from all sources reached $64 billion in 1977, up from $ 59 billion in 1976, according to the annual estimate made by the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD).

Of the overall total, the amount of aid. Official Development Assistance (ODA)—provided by the 17 industrial members of the DAC was $14.8 billion in 1977, compared with $13.7 billion in 1976. In dollar terms, this was an 8 per cent increase, but in real terms, the increase was only marginal. As a percentage of the donor countries' Gross National Product (GNP), ODA declined from 0.33 per cent in 1976 to 0.31 per cent, the second lowest ratio since statistics on aid flows were first gathered in the mid-1950s.

"This disappointing figure," the DAC said in a press communique issued June 29 in Paris, "is mainly attributable to a further and sharp decline" in the ratio of aid to GNP of the United States and the Federal Republic of Germany and "the relative stagnation" of Japan's ratio. Any recovery in the ratio of aid to GNP "must rely on improved performance by the big donors," the DAC commented, adding that "the immediate prospects are uncertain."

In total amount the other 14 DAC countries as a group again improved their performance, the communique noted, increasing their ODA as a share of their combined GNP from 0.47 per cent in 1976 to 0.49 per cent in 1977, "with particularly outstanding increases recorded by Sweden, the Netherland, Norway and Denmark."

Total Flow of Resources: The annual estimate of the DAC (figures for 1978 were reported in the *IMF Survey*, July 18, 1977) focuses chiefly on the flow of resources, particularly ODA, from its 17 members. However, overall estimates are provided which cover flows of resources from the oil exporting countries and from the centrally planned economies.

Of the total flow of net financial resources of $64.4 billion provided in 1977, DAC countries provided $43.7 billion of which about a third was on concessional terms. The $43.7 billion represented two-thirds of the 'developing countries' total receipts and if international bank lending is included (amounting to $11 billion in 1977 compared with $10 billion in 1976), the proportion is above four-fifth.

Donors other than DAC members are estimated to have provided $9.6 billion, or 15.1 cent, of net flows of resources to developing countries in 1977, compared with $8.8 billion, or 14.8 per cent, in 1976. The flow from members of the Organization of Petroleum Exporting Countries (OPEC) is estimated to have been $9 billion in 1977, compared with $8.1 billion in 1976. Total flows from these countries amounted to some three per cent of their GNP in 1977, and the portion that was on concessional terms amounted to two per cent of their GNP.

No data were available for

Net Flow of Financial Resources from DAC Countries

(Net disbursements in million US dollars)

	Average 1966-68*	1973	1974	1975	1976	1977
Total net flow	11,674	22,631	22,062	40,380	40,742	43,701
Total net flow in 1977 prices	24,552	32,393	25,678	44,384	42,377	43,701
Official Development Assistance	6,252	9,368	11,302	13,587	13,665	14,759
Bilateral grants and grant-like flows	3,535	4,462	5,336	6,268	6,542	7,208
Technical assistance	1,330	2,276	2,494	2,922	2,887	3,021
Bilateral loans at concessional terms	2,130	2,638	2,919	3,547	2,962	2,954
Contributions to multilateral institutions	587	2,268	3,047	3,772	4,161	4,597
Other official flows	562	2,458	2,192	3,024	3,305	3,014
Bilateral	542	2,068	2,208	2,945	3,186	
Multilateral	20	390	— 16	79	119	
Private flows	4,859	9,441	7,352	22,428	22,417	24,379
Direct investment	2,437	4,719	1,124	10,494	7,824	10,000
Bilateral portfolio	709	3,269	3,811	5,239	6,072	4,880
Multilateral portfolio	470	257	— 69	2,553	3,097	2,360
Export credits	1,243	1,196	2,486	4,142	5,424	7,139
Grants by private voluntary agencies	—	1,364	1,217	1,342	1,355	1,549

*Excluding Finland and New Zealand

Data: OECD Development Assistance Committee

1977 aid from centrally planned economies, the DAC reported, but such aid amounted to $0.6 billion in 1976.

Flows from DAC Countries: In 1975, total flows of resources both official and private but excluding international lending —from DAC members had reached one per cent of the donor countries GNP. In 1976 this proportion fell to 0.98 per cent, which amounted to $40.7 billion. Last year, the proportion declined again, to 0.93 per cent or $43.7 billion.

Private direct investment recovered from $7.8 billion in 1976 to $10 billion in 1977. Bilateral and multilateral portfolio investment dropped, respectively from $6.1 billion and $3.1 billion to $4.9 billion and $2.4 billion. However, net private export credits increased from $5.4 billion to $7.1 billion.

Official Development Assistance
(Net Disbursements from DAC Countries to Developing Countries)

	1970		1974		1975	
	(million US dollars)	(Percentage of GNP)	(million US dollars)	(Percentage of GNP)	(million US dollars)	(Percentage of GNP)
Total	6,807.0	0.34	11,302.1	0.33	13,588.2	0.35
Australia	202.4	0.59	430.3	0.55	506.8	0.60
Austria	10.6	0.07	59.4	0.18	64.4	0.17
Belgium	199.7	0 46	271.4	0.51	377.7	0.59
Canada	346.3	0.42	713.4	0.48	879.7	0.55
Denmark	59.1	0.38	168.2	0.55	205.3	0.58
Finland	6.8	0.07	37.9	0.17	48.2	0.18
France	971.0	0.66	1615.6	0.59	2093.3	0.62
Germany, Federal Republic	599.0	0.32	1433.4	0.37	1688.8	0.40
Italy	147.2	0.16	216.2	0.14	182.3	0.11
Japan	458.0	0.23	1126.2	0.25	1147.7	0.23
Netherlands	196.4	0.61	436.0	0.63	604.0	0.75
New Zealand	13.7	0.23	39.2	0.31	65.8	0.52
Norway	36.7	0.32	131.4	0.57	183.7	0.66
Sweden	117.0	0.38	401.7	0.72	566.0	0.82
Switzerland	30.2	0.15	67.7	0.14	103.6	0.19
United Kingdom	446.9	0.36	717.1	0.37	864.0	0.37
United States	3046.0	0.31	3437.0	0.24	4007.0	0.26

	1976		1977		1977 Commitment		
	(million US dollars)	(percentage of GNP)	(million US dollar)	(percentage of GNP)	Total commitments	Grants as % of total commitments	Commitment as % of GNP
Total	13,665.8	0.33	14,759.2	0.31	—	—	—
Australia	385.0	0.42	426.6	0.45	552.9	100.0	0.59
Austria	48.2	1.12	117.8	0.24	69.1	92.3	0.14
Belgium	340.1	0.51	371.0	0.46	595.1	90.9	0 74
Canada	886.5	0.46	991.5	0.51	1315.1	77.3	0.67
Denmark	214.4	0.56	255.4	0.68	(286.6)	(82.8)	(0.68)
Finland	50.7	0.18	48.7	0.17	60.0	89.9	0.20
France	2145.5	0.62	2393.9	0.63	2,619.8	84.8	0.69
Germany, Federal Republic	1384.0	0.31	1386.0	0.27	2562.2	58.9	0.50
Italy	226.3	0.13	168.0	0.09	189.0	93.4	0.10
Japan	1104.9	0.20	1420.9	0.21	(2602.0)	(37.7)	0.38
Netherlands	719.7	0.82	899.6	0.85	1,217.9	77.3	1,15
New Zealand	53.2	0.41	50.4	0.35	35.8	100.0	0.25
Norway	218.0	0.70	294.9	0.82	274.2	100.0	0.77
Sweden	607.6	0.82	779.4	0.99	997.2	98.1	1.27
Switzerland	112.3	0.19	118.0	0.19	(138.7)	(87.3)	(0.22)
United Kingdom	835.2	0.38	914.1	0.38	1,059.2	94.6	0.44
United States	4334.0	0.25	4123.0	0.22	6,175.0	67.0	0.35

Data : OECD Development Assistant Committee

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